

Public Opinion Quarterly

"Some of my best friends are black . . .": Interracial Friendship and
Whites' Racial Attitudes *Mary R. Jackman and Marie Crane*

Yuppies *John L. Hammond*

Do Yuppies Matter? Competing Explanations of Their Political
Distinctiveness *Michael Delli Carpini and Lee Sigelman*

The Perceived Threat of Nuclear War, Salience, and Open Questions
Howard Schuman, Jacob Ludwig, and Jon A. Krosnick

Ecological Concern, Attitudes, and Social Norms in Voting Behavior
James D. Gill, Lawrence A. Crosby, and James R. Taylor

Change and Stability in Presidential Popularity at the Individual Level
Kent L. Tedin

Ethnicity-of-Interviewer Effects Among Mexican-Americans and Anglos
*Stephen D. Reese, Wayne A. Danielson,
Pamela J. Shoemaker, Tsan-Kuo Chang, and Huei-Ling Hsu*

THE POLLS: The Most Admired Man and Woman *Tom W. Smith*

BOOK REVIEWS • BOOK NOTES

INDEX TO VOLUME 50

WINTER 1986

Published for The American Association for Public Opinion Research
by The University of Chicago Press

Public Opinion Quarterly

JOURNAL OF THE AMERICAN ASSOCIATION FOR PUBLIC OPINION RESEARCH

AAPOR ADVISORY COMMITTEE

LEO BOGART BURNS W. ROPER BERNARD ROSHCO

ELEANOR SINGER, EX OFFICIO

HERBERT ABELSON AND NORMAN M. BRADBURN, COUNCILLORS-AT-LARGE

Editor: ELEANOR SINGER

Managing Editor: INA C. JAEGER

Department Editors:

PHILIP A. HARDING, *News and Notes*

MARC B. GLASSMAN, *Book Reviews*

TOM W. SMITH, *The Polls*

EDITORIAL BOARD

JAMES R. BENIGER

JOAN S. BLACK

NORMAN M. BRADBURN

CHARLES F. CANNELL

MURIEL G. CANTOR

ALBERT H. CANTRIL

DONALD DILLMAN

MARTIN R. FRANKEL

HERBERT J. GANS

ALBERT E. GOLLIN

ROBERT HORNIK

MARY R. JACKMAN

F. THOMAS JUSTER

RONALD C. KESSLER

MARK R. LEVY

PHILIP MEYER

J. RONALD MILAVSKY

WARREN J. MITOFSKY

ELISABETH NOELLE-

NEUMANN

STANLEY PRESSER

DONALD F. ROBERTS

MORRIS ROSENBERG

CHARLES R. WRIGHT

DANIEL YANKELOVICH

Public Opinion Quarterly (ISSN 0033-362X) Volume #50, 4 issues (1986)

© 1986 by the American Association for Public Opinion Research. Published quarterly: Spring, Summer, Autumn, and Winter, by The University of Chicago Press, Chicago. Second-class postage paid at Chicago, IL. Subscription rates, U.S.A.: institutions 1 year \$38.00; individuals 1 year \$19.00. AAPOR member subscription rate, U.S.A.: individuals 1 year \$17.00. Student subscription rate (with copy of validated ID), U.S.A.: individuals 1 year \$17.00. Other countries add \$3.00 for each year's subscription to cover postage. Japanese subscription agent: Kinokuniya Company Ltd.

POSTMASTER: Please send all change of address notices to Public Opinion Quarterly, The University of Chicago Press, P.O. Box 37005, Chicago, IL 60637.

Mail orders and direct subscription information to: Journals Fulfillment Department, The University of Chicago Press, P.O. Box 37005, Chicago, IL 60637.

Single copy and back volume information furnished upon written request. Claims for missing issues can be honored only up to three months from date of issue. Indexed by Public Affairs Information Services, Social Sciences Index, United States Political Science Documents, Combined Retrospective Index Sets (CRIS), and Political Science Abstracts (PSA). Available from University Microfilms International (UMI).

Editorial Office: Journalism Building, Columbia University

116th Street and Broadway, New York, New York 10027

Business, Subscriptions, Back Issues: The University of Chicago Press,

5801 South Ellis, Chicago, IL 60637

AAPOR: Post Office Box 17, Princeton, New Jersey 08540

Subscribers and members of AAPOR are urged to notify the Subscription Office as soon as possible of changes of address. In doing so, give the old as well as the new address.

PUBLISHED BY THE UNIVERSITY OF CHICAGO PRESS

Public Opinion Quarterly

VOLUME 50

WINTER 1986

NUMBER 4

"Some of my best friends are black . . .": Interracial Friendship
and Whites' Racial Attitudes

Mary R. Jackman and Marie Crane 459

Yuppies

John L. Hammond 487

Do Yuppies Matter? Competing Explanations of Their Political
Distinctiveness

Michael Delli Carpini and Lee Sigelman 502

The Perceived Threat of Nuclear War, Salience, and
Open Questions

Howard Schuman, Jacob Ludwig, and Jon A. Krosnick 519

Ecological Concern, Attitudes, and Social Norms in Voting
Behavior

James D. Gill, Lawrence A. Crosby, and James R. Taylor 537

Change and Stability in Presidential Popularity at the Individual
Level

Kent L. Tedin 555

Ethnicity-of-Interviewer Effects Among Mexican-Americans
and Anglos

*Stephen D. Reese, Wayne A. Danielson,
Pamela J. Shoemaker, Tsan-Kuo Chang, and Huei-Ling Hsu* 563

THE POLLS: The Most Admired Man and Woman

Tom W. Smith 573

BOOK REVIEWS

Marc B. Glassman, Editor 584

Howard Schuman, Charlotte Steeh, and Laurence Bobo,
Racial Attitudes in America: Trends and Interpretations

Norval D. Glenn 584

Richard F. Hamilton and James D. Wright, *The State
of the Masses* Norman R. Luttbeg 586

BOOK NOTES Phyllis M. Endreny, Guest Editor 588

INDEX TO VOLUME 50 592

NOTICE TO CONTRIBUTORS

Manuscripts to be considered for publication should be sent to: Dr. Howard Schuman, Editor, Public Opinion Quarterly, Survey Research Center, Institute for Social Research, P.O. Box 1248, University of Michigan, Ann Arbor, Michigan 48106.

Four copies of each article should be submitted. Authors are urged not to submit original typescripts. Copies of manuscripts which are reviewed become the property of the journal, and unused copies will be returned only if the author provides a stamped, self-addressed envelope. Bibliographic references, footnotes, and tables should be typed to conform to the printed style of this journal.

All submissions that make use of survey data not archived at the Inter-University Consortium for Political and Social Research or the Roper Center must contain the following information: (1) A definition of the population from which the sample was drawn and a statement of the selection procedure sufficient to permit at least approximate replication. (2) The response rate and details of its calculation. (If response rate is not appropriate, the number of refusals.) (3) Dates the survey was conducted. (4) Exact wording of all questions used in the analysis.

Upon acceptance of an article by the journal, the author(s) will be asked to transfer copyright in the article to the publisher. This transfer will insure the widest possible dissemination of information under the U.S. Copyright Law.

PUBLIC OPINION QUARTERLY is hospitable to all points of view, provided that the material presented will help to illuminate problems of communication and public opinion. The American Association for Public Opinion Research assumes responsibility only for material signed by an officer of the Association in his or her official capacity. Statements of fact and opinion are made on the responsibility of the authors alone and do not represent the views of the editors.

PUBLIC OPINION QUARTERLY has been registered with the Copyright Clearance Center, Inc. Consent is given for copying of articles for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition that the copier pay through the Center the per-copy fee stated in the code on the first page of each article for copying beyond that permitted by the U.S. Copyright Law. If no code appears on an article, the author has not given broad consent to copy and permission to copy must be obtained directly from the author. All articles published prior to 1978 may be copied for a per-copy fee of \$1.00, also payable through the Center. The consent does not extend to other kinds of copying, such as for general distribution, resale, advertising and promotional purposes, or for creating new collective works.

"Some of my best friends are black . . .": Interracial Friendship and Whites' Racial Attitudes

MARY R. JACKMAN AND MARIE CRANE

See that man over there?

Yes.

Well, I hate him.

But you don't know him.

That's why I hate him.

—Parable (Allport, 1958:253)

THE NOTION that hostility has its basis in ignorance is a truism as much as the idea that social intimacy implies acceptance and equality. In discussions of whites' racial attitudes, these truisms are invoked re-

Abstract We examine the major tenets and assumptions of the well-known contact theory of prejudice, and we compare them with the more cynical reasoning implied by the infamous "Some of my best friends are black, but..." expression. After assessing the extant evidence for the contact theory, we use a unique set of national survey data to address the central postulates of that theory. We examine the racial beliefs, feelings, social dispositions, and policy views of whites who have contact with blacks as friends, acquaintances, or neighbors. Our results suggest that personal interracial contact is selective in its effects on whites' racial attitudes, that intimacy is less important than variety of contacts, and that any effects are contingent on the relative socioeconomic status of black contacts. On the basis of our analysis, we reassess the contact theory and propose a more political conception of the attitudes of dominant groups toward subordinates. We argue that the message contained in the relationship between personal contact with subordinates and intergroup attitudes is less benign than is suggested by the contact theory.

Mary R. Jackman is Professor of Sociology, the University of Michigan. During 1986-87 she is a Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, California. Marie Crane is Assistant Professor of Sociology, University of Texas at Austin. This research was supported by grants from NSF (SOC-78-16857) and NIMH (MH-26433), and by an NIMH Research Scientist Development Award to Mary Jackman (MH-00252). The authors are grateful to several people for their helpful comments on an earlier draft of this article: Barbara Anderson, Joe Feagin, Lowell Hargens, Robert Jackman, William Kelly, Donald Kinder, Barbara Reskin, Howard Schuman, James Sidanius, Brian Silver, Eleanor Singer, Walter Stephan, Blake Turner, and the anonymous reviewers.

peatedly. Physical separation of blacks from whites is such a marked feature of race relations in the United States that, indeed, only a tiny minority of whites could rightly claim that "some of their best friends" are black. The rarity of interracial friendship combined with the prevailing conservatism of whites' racial attitudes would thus seem to underscore the validity of Allport's parable. Yet there is alternative folk wisdom on the subject that seems equally plausible. The infamous "some of my best friends are black. . ." expression in the title of our article is much less sanguine about the effects of personal intimacy with blacks on interracial attitudes.

Friends make up the social fabric of our day-to-day lives. Hence the significance typically attached to the pattern of personal ties in the reinforcement or muting of subjective group boundaries (see both Marxist and pluralist accounts, e.g., Marx, 1964: 178-202; de Tocqueville, 1969; Polsby, 1980; Hodge and Treiman, 1968). In the analysis of whites' racial attitudes in the United States during the past few decades, the issue of personal intergroup contacts has seemed especially pertinent. Researchers in the 1940s and 1950s grappled with the widespread problem of white prejudice and discrimination in the historical context of a society marked by pervasive racial segregation. Motivated by the spirit of social reform, analysts sought to identify ways in which whites' personal contact with individual blacks might be manipulated by public policy to dissipate their prejudice toward blacks as a group. Out of this concern emerged one of the most prominent theories in the prejudice literature, known as the *contact theory*.

In this article, we outline the major tenets and assumptions of the contact theory, compare them with the ideas implicit in the "Some of my best friends are black, but..." expression, and briefly assess the evidence for the contact theory that was generated by some landmark experiments in social engineering. We then employ a unique set of national survey data to address a series of empirical questions dictated by the contact theory. On the basis of that analysis, we reassess the contact theory and propose a more political conception of the attitudes of dominant groups toward subordinates. We suggest that the relationship between personal contact with subordinates and intergroup attitudes contains a less benign message than that put forth by the contact theory.

The Contact Theory. This theory holds that the sharp rupture between the social lives of whites and blacks promotes whites' ignorance about blacks. This ignorance feeds erroneous, oversimplified, negative beliefs about blacks, which in turn engender feelings of hostility and discriminatory social and political predispositions toward blacks. By bringing whites into personal contact with blacks, erroneous images of blacks can be corrected and hostile dispositions softened (Myrdal,

1944; Deutsch and Collins, 1951, 1965; Wilner et al., 1952, 1955; Allport, 1958; Amir, 1969).

To be effective, the interracial contact must meet a specified set of conditions. First, the contact should not take place within a competitive context. Second, the contact must be sustained rather than episodic. Third, the contact must be personal, informal, and one-to-one. Fourth, the contact should have the approval of any relevant authorities. Finally, the setting in which the contact occurs must confer equal status on both parties rather than duplicate the racial status differential. Much interracial contact does not meet these conditions. Consider, for example, the contact between white mistress and black maid, or between white and black neighbors who pass each other daily on the street without personal interaction, or between black and white children who attend the same school by virtue of a school-busing program opposed by the local school board. These forms of contact are considered insufficient to remove whites' blinders and allow them to perceive blacks in a fresh light. In contrast, the contact that occurs between intimate, personal friends appears to meet optimally the conditions of the contact theory.

While the contact theory developed primarily out of a policy-oriented concern with proposals to reduce prejudice, its central tenets rest on important assumptions about the very nature of intergroup attitudes. Most fundamentally, proponents of the contact theory, like students of interracial attitudes generally, have assumed that intergroup attitudes express a parochial negativism, rather than political interests. This assumption is reflected in the concept of prejudice, which has been routinely used to define the problem. Witness Allport's classic definition of prejudice: "Ethnic prejudice is an *antipathy based upon a faulty and inflexible generalization*. It may be felt or expressed. It may be directed toward a group as a whole, or toward an individual because he is a member of that group" (Allport, 1958:10, emphasis added). Thus, negative intergroup attitudes are prejudiced attitudes that have an irrational basis and are permeated by feelings of hostility. This fundamental assumption has three important corollaries.

First, intergroup attitudes are interpreted primarily as a property of individuals. Researchers were drawn by individual-level variation in attitudes toward blacks and attempted to account for that variation by examining individual differences in personality, socialization, or interracial experience. The contact theory focused on the last as a potential policy tool.¹ Second, if negative intergroup attitudes are founded in irrationality and misinformation, the way to positive attitudes is with

¹ Bound by a similar conception of the problem and by a common social problems motivation, we explored alternative theories as mutually compatible solutions.

rationality and correct information. Serious differences do not exist between blacks and whites, and thus exposure to blacks (under the right conditions) will reveal the falsity of negative beliefs about blacks. Third, because discriminatory behavior predispositions toward blacks reflect a feeling of antipathy, the way to nondiscriminatory predispositions is to generate positive feelings toward blacks. In short, the locus of the problem was in the individual, in erroneous generalizations, and in the connection between personal feelings of antipathy and discriminatory predispositions. These all pointed logically to the probable efficacy of a policy that would foster close personal friendships between individual whites and blacks.

"*Some of my best friends are black, but...*" We are all familiar with this infamous expression, which suggests a more insidious relationship between personal friendship and intergroup attitudes. First, it implies that I separate my personal relationship with an individual who is black from my impersonal relationship with the social category "blacks." Second, because I have a personal connection with blacks, I feel I am an authority about blacks and therefore I am confident in my judgments. Third, I feel that having one or two black friends testifies that I am personally unbiased and fair in my assessments of blacks, which again massages my complacency about my racial views. In short, having one or two black friends gives me a license to think what I please about the group as a whole.

The ideas implied by this common expression have not found their way into an alternative theory about the relation between personal friendship and intergroup attitudes. The notion that something powerful blocks the benign generalization from one's friends to other people suggests, however, that intergroup attitudes may be driven by a force that is not susceptible to social reform.

Evidence for the Contact Theory from the Housing Project Studies. Several landmark social experiments in racial integration were conducted in the 1940s and 1950s, most notably in the wartime army (Stouffer, 1949), on merchant ships (Brophy, 1945), and in low-income public housing projects (Deutsch and Collins, 1951, 1965; Wilner et al., 1952, 1955). Each study reported positive effects on whites' racial attitudes, although the generality of the attitudes to broader social situations was sometimes questionable. By far the most comprehensive and ingenious studies were those conducted by Deutsch and Collins, and Wilner et al. These analysts compared segregated housing projects with projects that had been integrated in a variety of ways. And they used attitude measures that reflected racial beliefs, feelings, and social predispositions—in relation to both blacks living in the project and blacks in general.

In their analysis of the behavior and attitudes of the white housewives living in these varying conditions, these investigators found that proximity had a pronounced positive effect on the level of informal interaction and friendship with blacks, and that both of these factors in turn had a strong positive effect on attitudes toward blacks. The housing studies stressed the importance of sustained, intimate contacts in order to provide a compelling perceptual stimulus and a strong motivational basis for attitude change. Wilner et al. observed that "the more intimate the contact, the more favorable the attitude—without exception" (1955:99). In a subsequent essay, Cook reflected: "One of the clearest findings of studies on the relation between intergroup contact and attitude change is that, while individuals rather quickly come to accept and even approve of association with members of another social group in situations of the type where they have experienced such association, this approval is not likely to be generalized to other situations unless the individuals have quite close personal relationships with members of the other group" (1963:41-42).

The public-housing studies left two important empirical questions unanswered. First, are the strong positive outcomes observed in the relatively controlled, bounded, and stable setting of the public housing projects generalizable to contact situations in ordinary (unplanned) neighborhoods and workplaces? There has been a paucity of cross-sectional survey data addressing the empirical questions posed by the contact theory.² Second, we still have little idea of the relationship between personal interracial contact and racial predispositions of a more political nature. The housing-project studies were understandably absorbed with the more immediate question of whether whites could learn to accept and respect blacks in personal terms. They measured racial beliefs, feelings, and social dispositions, but they did not measure support for governmental intervention to promote black civil rights and racial equality. Do the positive effects observed for the more personal, affectively loaded measures also hold for more political orientations toward blacks? Is the issue of equality tied to the issue of personal acceptance?

Analysis

DATA AND EMPIRICAL QUESTIONS

The data for this article come from a national probability survey of adults aged 18 and over residing in the 48 contiguous United States.

² Two interesting, and inconclusive, studies of the effects of neighborhood integration in specific communities are reported in Williams (1964) and Hamilton and Bishop (1976).

The survey was administered in the fall of 1975 by the Survey Research Center of the Institute for Social Research at The University of Michigan. The response rate was just under 70 percent, and face-to-face interviews were conducted with 1914 respondents, of whom 1648 were whites. The data contain two sets of measures that are uniquely suited to the analysis of personal interracial contact and white racial attitudes.

First, there are unusually detailed and complete data on the *racial composition of people's friendship circles*. Questions about respondents' friends were introduced as follows:

I would like to ask you some questions about the people you consider your good friends—by good friends I mean adults you enjoy getting together with at least once a month or so and any other adults who live elsewhere that you try to keep in close touch with by calling or writing.

Respondents were then handed a "Friends Sheet" on which they listed the first name of each of their "good friends," followed by a variety of other information including each friend's race and occupation.

These data are considerably more detailed and specific than previous attempts in surveys to assess the extent of interracial friendship, where the standard question has been of the global type, "Are your friends all white, mostly white, about half white and half black, mostly black, or all black?" (see, e.g., the SRC Election Studies). At the same time, our data give more complete information on the respondent's entire circle of friends than does the standard procedure in the literature on friendship networks of seeking individual-level data on the respondent's three best friends only.

After completing the Friends Sheet, respondents were asked, "Are there any other people you keep in touch with or get together with occasionally?" If they said "yes," they were asked, "Which of the categories on this card best describes how many blacks and whites are among these people? [All black; Mostly black; About half and half; Mostly white; All white]." This global question allows us to reach beyond the bounds of good friendship and make an approximate assessment of the *racial composition of people's acquaintance circles* as well.

Those data are supplemented with information on the *racial composition of the respondent's neighborhood and place of work*, about any *informal interaction with blacks* in each of those settings ("Do you and any of your black neighbors ever do anything like talk informally over coffee or in the street, lend each other things, or help each other out with baby-sitting or chores?"; "Do you and any of the blacks at work ever have lunch together or talk informally over coffee about things not

related to work?"; if "yes": "How often do you do this—very often or not too often?" [some respondents volunteered "sometimes"], and about *exposure to blacks in previous neighborhoods and workplaces* (e.g., "Have you ever lived in another neighborhood that had one or more black residents? [Yes/No]").

The second set of measures is an unusually comprehensive series of questions to reflect whites' *racial attitudes*. The items appear in Appendix A. They encompass all the primary elements of "prejudice": beliefs about personality trait differences between blacks and whites, feelings of emotional preference for whites over blacks, personal predispositions for contact with or avoidance of blacks, and policy orientations relating to government intervention on behalf of blacks. All of the attitude items have neutrally balanced response-options in order to avoid response biases, and the most sensitive items (on racial beliefs and feelings) were contained in self-administered booklets in order to minimize social desirability pressures.

Our analysis begins with the preliminary issue of how some whites come to acquire black friends, by choice or by chance. Next, we address the baseline question of the relationship between interracial friendship and attitudes toward blacks, and we compare the effect of friendships and more casual acquaintances with blacks. Do people seem to generalize from personal contacts to the group as a whole? Are the close personal ties of friendship more compelling or are the racial attitudes of whites as likely to be influenced by the looser (and less rarely acquired) ties of acquaintanceship with blacks? Third, we compare the effects of such personal interracial contact with the effects of sheer proximity to blacks. Are the conditions specified by the contact theory necessary for a change in attitudes, or is mere exposure to blacks sufficient to break down prejudiced attitudes in this segregated society? As we address these questions, we also examine the evidence for a "tokenism" effect. Is one black friend or acquaintance enough to change a white's racial attitudes, or is such personally observed data disregarded unless there is a less token presence of blacks in a white's social environment? Finally, we abandon the idea that our friends are all equals in our affectionate eyes, and examine the racial attitudes of whites who have black friends, according to the relative socioeconomic status of their black and white friends. For each of these issues, we can compare the effects of interracial contact on whites' interracial beliefs, feelings, social predispositions, and policy orientations to assess the extent to which they respond in a unitary or divergent way to the establishment of personal ties with blacks.³

³ In addressing these questions, we rely on percentage cross-tabulations, for several reasons. First, we wish to reduce the data as little as possible. Second, our purpose is not

ACQUIRING A BLACK FRIEND

Consideration of the relationship between personal interracial contact and racial attitudes raises the possibility of self-selection: we like to think that something as personal as our circle of good friends reflects our own choices and not factors that are out of our control, and we know that many whites would prefer to avoid or minimize their contact with blacks. In this article, however, we assume that whites' initial racial attitudes have little to do with their likelihood of acquiring a black friend, and that it is therefore appropriate to ask whether friendship with individual blacks influences the way whites think about blacks as a group. There may be occasional extreme cases of whites who either eagerly seek out or steadfastly avoid contact with blacks, but for the vast majority, other exigencies overwhelm racial considerations in the selection of friends. Much as many whites might prefer to avoid blacks, economic and practical concerns constrain individuals to take a job regardless of blacks' presence in the workplace, to reside in a neighborhood regardless of blacks' presence there, and so on.⁴ Thus hemmed in, the exercise of personal choice is itself unlikely to be a singular response to race, but instead is a response to the configuration of personal characteristics that each individual contact offers (e.g., interests, lifestyle, personality).

The validity of our argument cannot be demonstrated unequivocally with cross-sectional data, but its assumptions and empirical expectations differ sharply enough from those of the self-selection thesis to present several critical issues that can be investigated empirically. The self-selection thesis assumes that whites' racial attitudes determine whether they enter or avoid situations where blacks are present, or, if forced into an interracial situation, whether they engage in personal contact with blacks. Our argument assumes that the racial composition of individuals' friendship circles primarily reflects the availability of blacks and whites in their day-to-day lives. A series of empirical expect-

to account for the overall variance in whites' racial attitudes, which is the kind of endeavor for which a more formal statistical procedure (such as regression analysis) is designed. Instead, we want to focus on the contact theory's more modest prediction that when personal contact with blacks takes place, prejudice is reduced. Finally, given the relatively small number of whites who have personal contact with blacks, a more formal statistical procedure would provide a less sensitive indication of any contact effects.

⁴ This argument appears to fly in the face of the much-publicized phenomenon of "white flight." However, the empirical evidence for white flight from racially integrated schools is mixed (see, e.g., Farley et al., 1980). Besides, to the extent that white flight from blacks does occur in neighborhoods and schools, it is a collective rather than an individual phenomenon: individual decisions to leave are influenced by a variety of factors, including the behavior of others, assessments about future property values, school quality, and so on.

tations derives from these assumptions, which can be subsumed under two broad issues: (1) the relationship between proximity to blacks and personal contact with blacks, and (2) the nature of the association between interracial contact and racial attitudes.

Proximity and Friendship. The literature on sociometric choice has taught us that we make friends with people who are most readily available to us (Festinger et al., 1950; Berscheid and Walster, 1969; Vander Zanden, 1984). While friends reflect an element of personal choice, they do not reflect a free choice: we are most likely to become friendly with those who are thrown consistently in our path. In their classic study of friendship patterns in a student housing project, Festinger et al. (1950) showed that proximity was the single most important factor in determining those patterns: "It is a fair summary to say that the two major factors affecting the friendships which developed were (1) sheer distance between houses and (2) the direction in which a house faced" (Festinger, 1951:156). Their discovery was both profound and obvious. Our lives are sufficiently constrained by our work and our families that the path of least resistance is to find our friends from among those who find us. With such people we share enough common social turf to have an uncontrived entrée to their acquaintance and repeated opportunities for casual follow-up. The process is so pervasive that it is obvious to recognize at the same time as it is imperceptible to us as we conduct our social lives.

If interracial friendships are governed by the same principles, personal contact with blacks should increase with whites' proximity to blacks. On the other hand, if racial preference intervenes in the process, and whites' attitudes determine whether they seek, accept, or avoid contact with blacks, the relative proximity of blacks should not be related to the amount of contact that whites have with blacks.⁵ This issue was addressed by both Deutsch and Collins (1951) and Wilner et al. (1952), who reported a strong relationship between the degree of proximity to blacks and the extent of informal interaction and friendship with blacks. More recent work on classroom racial composition and cross-race friendship choice also demonstrated the generality of the proximity principle (Hallinan, 1982; Hallinan and Smith, 1985). Our own data also indicate that whites' proximity to blacks in ordinary neighborhoods and workplaces is strongly related to their likelihood

⁵ If the proximity results from purposive behavior on the part of whites, interactions with blacks should be highly probable among all whites with some proximity to blacks, regardless of the degree of proximity. If it is the degree of personal contact that reflects racially motivated purposive behavior within interracial situations, we would expect the probability of interaction with blacks to be equally high or low regardless of the relative proportion of blacks in an integrated situation.

and frequency of personally interacting with blacks, as well as to their likelihood of having black friends and acquaintances. Those relationships are reported in the first part of Appendix B.

Interracial Contact and Racial Attitudes. The self-selection thesis assumes a strong and unequivocal association between interracial contact and racial attitudes. In contrast, our assumption about the process of interracial contact leaves its association with attitudes an open question. The results of the analyses reported in this article indicate that neither the strength of the relationship between interracial contact and racial attitudes nor its specific nuances conform to the logical expectations of the self-selection thesis. It would be premature to discuss that evidence at this point: relevant data from Tables 1, 2, 3 are identified in the second part of Appendix B.

THE INFLUENCE OF BLACK FRIENDS AND ACQUAINTANCES

We now examine the significance for whites' racial attitudes of the establishment of personal ties to blacks. Are whites who have one or more black friends different in their racial attitudes from whites who have no black friends? And what are the attitudinal effects of the looser, more easily acquired ties of casual acquaintance with blacks?

Only 9.4 percent of whites can name a "good friend" who is black, while 21.4 percent have at least one black acquaintance. Because interracial friendships and acquaintances are both fostered by the same circumstances, most whites who reach the more "difficult" level of having a black friend also have a black acquaintance. Thus, about 28 percent of whites with one or more black acquaintances also have at least one black friend, but fully 66 percent of whites with one or more black friends have at least one black acquaintance. In view of the heavy overlap between the two levels of interracial contact, we examine their effects on attitudes concurrently. This has the additional benefit of allowing us to examine their separate and joint effects. This is important because, unless whites have both friends and acquaintances who are black, their interracial contact is probably restricted to just one (token) black. About two-thirds of whites with interracial friendships have only one black friend, and 94 percent of those whites who do not describe their acquaintances as "all white" say they are "mostly white," which probably indicates no more than one black acquaintance. Are whites' racial attitudes more likely to be influenced when their personal contact with blacks exceeds a minimal, token level?

Table 1 reports the percentage of whites with conservative racial attitudes, according to whether they have at least one black friend and/or acquaintance. Responses are dichotomized into those with and with-

Table 1. Percentage of Whites with Conservative Racial Attitudes, by Whether They Have Black Friends and/or Black Acquaintances

	No Black Acquaintance		Black Acquaintance(s)	
	No Black Friend	Black Friend(s)	No Black Friend	Black Friend(s)
More whites dependable	53.8	51.0	46.6 [†]	23.3 ^{**†}
More whites intelligent	59.8	51.0	50.7 ^{††}	38.6
More blacks lazy	38.7	28.0	32.9	26.8
Warmer toward whites	49.8	33.3 [*]	35.8 ^{††}	18.1 ^{**†}
Closer toward whites	65.5	42.0 ^{**}	51.5 ^{††}	30.1 ^{**}
Prefer whites in workplace	58.7	41.5 ^{**}	38.9 ^{††}	22.1 ^{**††}
Prefer whites in neighborhood	84.9	76.9	69.0 ^{††}	48.9 ^{**††}
Government should do <i>same</i> or <i>less</i> to ensure:				
Integrated schools	84.2	75.5	83.7	77.2
Equal housing opportunity	73.0	65.9	65.7 [†]	64.6
Equal job opportunity	79.5	72.5	72.1 [†]	64.4
Base N (ranges)	925-1162	44-53	207-240	79-95

* Net difference between whites with and without *black friends* statistically significant ($p \leq .05$; chi-square test)

** Net difference between whites with and without *black friends* statistically significant ($p \leq .01$; chi-square test)

[†] Net difference between whites with and without *black acquaintances* statistically significant ($p \leq .05$; chi-square test)

^{††} Net difference between whites with and without *black acquaintances* statistically significant ($p \leq .01$; chi-square test)

out any black friends or acquaintances, respectively. Responses to the attitude items are also dichotomized, focusing on the conservative end of the distribution.⁶

Results indicate, first, that the effects of having a black acquaintance are about the same as the effects of a black friend. A comparison of the

⁶ Because of the infrequency of personal interracial contact, there are too few whites in critical cells for us to conduct multivariate analyses that would control for the potential effects of demographic variables. After examining the effects of several demographic variables on (a) our measures of interracial contact and (b) our racial attitude measures, we determined that there were only two such variables that could potentially be confounding factors, region of residence (South/non-South) and age. Both demographic variables are weakly related to one or more of our contact measures as well as to racial attitudes. Small N's preclude the examination of effects for southerners (i.e., whites residing in the former Confederate states), but all of our tables on the effects of racial contact (Tables 1, 2, and 3) have been recalculated for nonsouthern whites only, without any noteworthy alteration in the pattern or strength of the results. Results were also unaffected when we recalculated Tables 1, 2, and 3 for whites dichotomized into those aged less than 35 and 35 or older. Some may consider education another potentially confounding factor, but results reported by Jackman and Muha (1984) indicate that education is unrelated to the attitude measures used in the present article.

second column (black friend[s] but no black acquaintance) and third column (black acquaintance[s] but no black friend) reveals few differences, with no systematic pattern to the few small differences that do exist.⁷ This suggests that it is not the closer intimacy of good friendship that is critical, but simply the experience with individual blacks that can come from relatively superficial relationships. Since whites are more likely to acquire black acquaintances than friends, the comparability of the effects of these two forms of personal contact on racial attitudes is encouraging.

The limited effects of either form of contact, however, are less encouraging. While the size of the percentage differences fluctuates, the independent effects of either friend(s) or acquaintance(s) in the absence of the other are small. In general, whites must have both friend(s) and acquaintance(s) who are black before there is any appreciable impact on their attitudes toward blacks.⁸ It seems more important to escape tokenism by establishing multiple contacts with blacks than to attain a high degree of personal intimacy with one's black contacts.

The association between multiple personal contacts with blacks and racial attitudes ranges from considerable to negligible, depending on the attitudinal element in question. The two aspects of whites' racial attitudes that seem to succumb most to the pressures of personal contact with blacks are affective preferences for whites over blacks and personal predispositions to avoid contact with blacks. The tendency to prefer whites over blacks in basic feelings of warmth and closeness and in personal social predispositions in the workplace and neighborhood does decline quite markedly, especially among whites who have both friends and acquaintances who are black.⁹ The difference between the

⁷ Because of the larger *N* with black acquaintances than with black friends, percentages in the third column are more likely to be statistically significant.

⁸ We obtained the same pattern of results as that displayed in Table 1 with an alternative classification of black friends and acquaintances, as follows: (1) No Black Friends or Acquaintances, (2) One Black Friend or Mostly White Acquaintances, (3) More than One Black Friend or Acquaintances Half Black, or More or Black Friend(s) and Acquaintance(s).

⁹ On the social predisposition items, we consider the responses "All white" and "Mostly white" both as expressions of a preference for whites, as opposed to responses of half black or more or the expression of no preference. (Of course, since blacks constitute only about 12 percent of the population, it would be impossible to make all neighborhoods or places of work half black or more; however, the respondent is being asked for an expression of *personal* social predispositions toward blacks, not for a generalized policy feasibility assessment). While the response "All white" certainly represents a more blatant expression of racial preference than does "Mostly white," the distinction between these two responses may have more to do with ideological style than with the substantive issue of maintaining or abandoning white dominance (Jackman and Muha, 1984: 764). If we look at the "All white" and the "Mostly white" responses

latter group of whites and whites with no black friends or acquaintances ranges between 32 and 37 percent on these four items (second and third panels of Table 1).¹⁰ Negative beliefs about blacks show less consistent declines: the difference between whites with no blacks in their social circles and whites with both black friends and black acquaintances is about 30 percent for the trait Dependable, 21 percent for the trait Intelligent, and 12 percent for the trait Lazy (first panel of Table 1). The perceived trait distinction that shows the smallest change (Lazy) is the one that has the smallest endorsement among whites initially. Nevertheless, the independent effects of either black friends or black acquaintances in the absence of the other type of contact are smaller for all three trait distinctions than for affective distinctions or personal social predispositions.

Finally, black friends and acquaintances have almost no effect on whites' policy orientations toward blacks. As one reads across the three rows in the bottom panel of Table 1, there is generally negligible change in the prevailing conservatism of whites' racial policy views.¹¹ This means that between two-thirds and three-quarters of whites who have blacks among their good friends and acquaintances persist in opposing any increase in governmental attempts to promote racial equality.

THE EFFECTS OF PERSONAL CONTACT VERSUS SHEER PROXIMITY

The development of personal relationships between whites and blacks is heavily determined by their physical proximity. Thus, our assessment of the effects of such personal relationships on racial at-

separately, they each show similar declines from one side of the table to the other: for Workplace, the "All white" response ranges in frequency from about 18 to 0 percent, the "Mostly white" response from about 40 to 22 percent; for Neighborhood, the "All white" response ranges from about 43 to 20 percent, the "Mostly white" response from about 41 to 28 percent.

¹⁰ For the pairs of items reflecting both affective and social dispositions, one item is more "difficult" than the other. Whites are more reticent to express affective preference for their own racial group on the warm-cold dimension (which implies more overt hostility) than on the closeness dimension (the general tendency of whites to avoid expressing flagrantly hostile racial attitudes is discussed in Jackman and Muha, 1984). In their social dispositions, whites are less likely to express a preference for their own racial group in the workplace than in the neighborhood: the neighborhood is apparently more sensitively regarded as a bastion to be protected from black intrusion. Both of these distinctions are maintained across different levels of the Black Friends and Acquaintances variables.

¹¹ Many of those whom we term "conservative" are actually reactionary in their racial policy views: that is, they think the government should be doing *less* than it currently is to promote racial equality. On the issue of integrated schools, the view that the government should be doing *less* is expressed by 60 percent of whites with no black friends or acquaintances and 49 percent of whites with black friend(s) and acquaintance(s). On the other two issues, reactionary views are expressed by about 34 percent of the former group and 19 percent of the latter group of whites.

titudes must take stock of any possible effects of proximity itself. The contact theory emphasizes that the development of personal ties is critical. If so, controlling for sheer proximity to blacks should not alter the effects we observed in Table 1.

Hamilton and Bishop (1976) found a small positive change in the "symbolic racism" scores of whites who had acquired a black family in their neighborhoods in the previous year, whether or not they had ever interacted with that family. Wilner et al. (1952:67-68) found a more complex association whereby the degree of proximity to blacks and the amount of personal interaction with blacks were mutually reinforcing in bringing about a positive change in white housewives' "esteem" for blacks. The inconsistent results between these two studies may reflect differences in their attitude measures. Hamilton and Bishop's "symbolic racism" scale is more policy-oriented and also includes opinions about "symbolically laden" topics such as the safety of neighborhood streets, while Wilner et al.'s measure is of racial affect. Our data in Table 1 indicate that affect is more sensitive to the effects of personal contact. The difference in results may also stem from the two measures of personal interaction: Hamilton and Bishop's measure largely reflects relatively infrequent and possibly fleeting personal contact with a black neighbor, while Wilner et al.'s measure reflects repeated, sustained personal interaction. Our data permit us to resolve those inconsistencies by examining our array of racial attitude measures for the effects of residential proximity to blacks and sustained personal association with blacks.

Table 2 presents the percentage of whites with conservative racial attitudes, according to their degree of personal contact with blacks and their residential proximity to blacks. The results from Table 1 allow us to treat black friends and acquaintances as equivalent, and to combine them in the following trichotomy: (1) whites with No Black Friends or Acquaintances, (2) whites with Black Friend(s) or Black Acquaintance(s), and (3) whites with Black Friend(s) and Black Acquaintance(s). Table 2 is also divided into three vertical sections according to whites' residential proximity to blacks: (1) whites who have Never lived in a neighborhood with blacks, (2) whites whose Previous or Current neighborhood includes some blacks, and (3) whites whose Previous and Current neighborhoods include some blacks. This trichotomy focuses on how sustained whites' proximity to blacks has been over time.¹²

¹² Clearly, the neighborhood is not the only place where whites may come into contact with blacks, but it does constitute one major potential meeting place. Of the two arenas for which we have data on proximity to blacks, we have chosen to focus on the neighborhood rather than the workplace, for two reasons. First, data on workplace proximity are

Table 2. Percentage of Whites with Conservative Racial Attitudes, by Whether They Have Black Friends and Acquaintances and by Previous and Current Proximity to Blacks in the Neighborhood

	Proximity to Blacks in Neighborhood								
	Never			Previous or Current			Previous and Current		
	Black Friends/Acquaint.			Black Friends/Acquaint.			Black Friends/Acquaint.		
	None	Friend or Acq.	Friend and Acq.	None	Friend or Acq.	Friend and Acq.	None	Friend or Acq.	Friend and Acq.
More whites dependable	56.2	53.6	(25.0)	51.4	48.4	29.3*	53.4	40.2	16.2**
More whites intelligent	62.5	57.4	(50.0)	57.6	53.2	57.5	58.4	41.0	14.3***††
More blacks lazy	38.1	40.0	(37.5)	40.2	30.7	34.1	34.9	28.9	15.2
Warmer to whites	53.4	46.4	(22.2)	44.5	35.5	25.0**	54.4	27.7	9.8**
Closer to whites	67.4	58.2	(40.0)	64.1	50.4	29.5**	64.0	43.6	28.2**
Prefer whites in workplace	61.1	52.6	(20.0)*	58.3	41.6	34.1**	51.9	27.4††	9.8***†
Prefer whites in neighborhood	87.5	91.2	(55.6)**	84.6	72.3	65.9**	76.5††	54.3††	29.3***††
Government should do same or less to ensure:									
Integrated schools	83.3	86.8	(90.0)	84.3	86.3	83.7	85.6	73.7†	66.7**
Equal housing opportunity	73.1	78.3	(85.7)	73.3	66.7	71.8	70.7	56.5†	51.5*
Equal job opportunity	78.8	73.6	(88.9)	80.4	75.6	64.3*	77.8	65.6	59.0*
Base N (ranges)	394-506	46-56	7-10	390-482	117-138	39-44	133-162	83-95	33-41

* Net effect of friends/acquaintances statistically significant ($p \leq .05$; chi-square test)

** Net effect of friends/acquaintances statistically significant ($p \leq .01$; chi-square test)

† Net effect of neighborhood proximity statistically significant ($p \leq .05$; chi-square test)

†† Net effect of neighborhood proximity statistically significant ($p \leq .01$; chi-square test)

The effects of proximity and personal contact are mutually dependent and mutually reinforcing: each must be present for the other to have an effect, and the impact of each tends to increase as the level of the other increases. These results confirm and generalize for a broad array of racial attitudes the results reported by Wilner et al. (1952) for

available only for respondents who are currently employed, a restriction that severely reduces the N (unless we care to make the heroic assumption that people who are not employed have less proximity to blacks). The neighborhood is a universal experiential locale. Second, since whites are more resistant to the idea of having blacks in the neighborhood than in the workplace, the neighborhood represents a more significant arena of proximity. When we reestimate Table 2, substituting Workplace proximity for Neighborhood proximity, the N 's in three of the cells become too small, making it difficult to interpret the results with confidence. However, those results suggest that proximity to blacks in the Workplace has less import for whites' racial attitudes than does proximity to blacks in the Neighborhood.

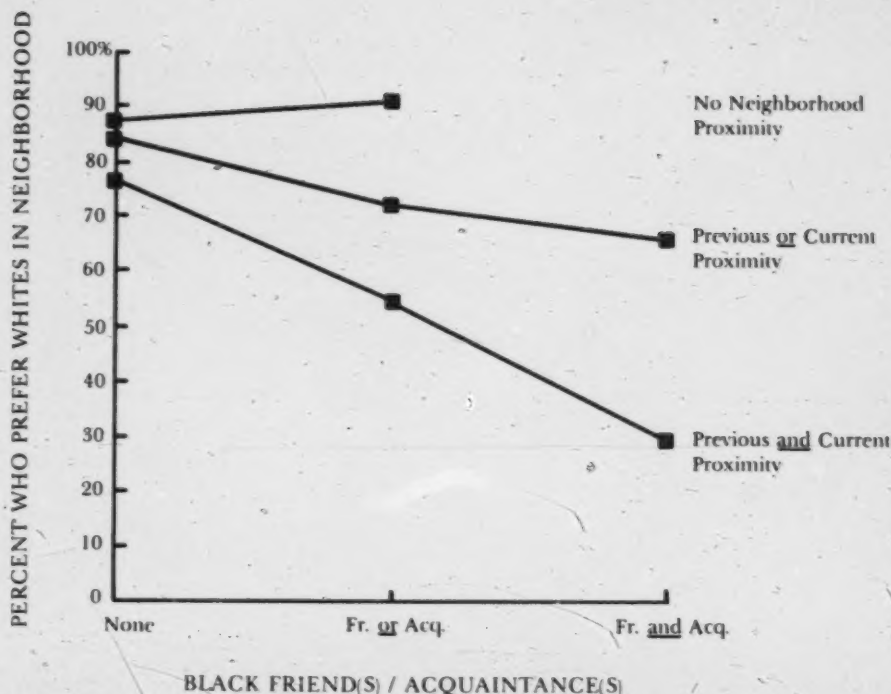


Figure 1. Effects of Black Friends and Acquaintances on Whites' Expressed Preference for Whites in the Neighborhood, by Different Levels of Proximity to Blacks in the Neighborhood

racial "esteem." Sheer proximity to blacks appears to be of little value, unless it is accompanied by personal contact, but proximity does have a direct effect of its own on racial attitudes when personal contact accompanies it, and the more personal contact there is, the greater the effect of proximity. Conversely, it appears that personal contact needs to be backed up by physical proximity to blacks if it is to influence whites' racial attitudes, and the more sustained the proximity, the greater the impact that personal contact has. These conclusions must be tempered somewhat in view of the virtually empty cell for whites who have high levels of personal contact with blacks but no history of proximity to blacks in their neighborhoods, but confidence is encouraged by the consistency of the pattern across all other cells in Table 2. These results reinforce our inference from Table 1 that diversity of contacts with blacks is more critical than the intimacy of interracial contacts. The pattern of results is illustrated in Figure 1.

If one compares the net effects of personal contact in Table 2 with those reported in Table 1, the relative susceptibility of various racial attitudes remains unchanged. As before, affective and personal predispositions are generally the most strongly related to personal contact. However, in the highest proximity condition, contact effects on two of

the three trait distinctions are just as large. And, unlike the effects in Table 1, there is consistent, significant movement in policy orientations as personal contact increases. The upper-bound net effects of residential proximity are harder to assess, because of the empty cell in the low-proximity/high-contact condition. However, it is personal predispositions for contact with blacks that seem to be the most clearly susceptible to the effects of residential proximity, especially among whites with only token personal contact with blacks. The net impact of residential proximity to blacks generally appears to be comparable to the net impact of personal contact with blacks. Personal contact has slightly more consistent effects on affective and social predispositions, while residential proximity has a somewhat stronger effect on policy orientations.

The *joint* effects of residential proximity to blacks and personal contact with blacks represent a considerable advance over the effects of personal contact reported in Table 1. Cognitive distinctions (with the exception of the trait *Lazy*, which is less popularly endorsed) and affective distinctions show a total change from one side of the table to the other of about 40 percentage points or more, while social predispositions indicate an even larger change of about 50 to 60 percentage points. The total change in policy orientations lags considerably behind, with the percentage difference generally about 20 points from one side of the table to the other. Overall, the inclusion of residential proximity to blacks pushes attitudes further away from racial conservatism by an additional 10–26 percentage points over the total movement in attitudes wrought by black friends and acquaintances in Table 1.¹³

Yet even the joint effects of multiple interracial experiences are limited. The two attitude items that are influenced most by the joint effects of residential proximity and personal contact are those that are substantively closest to the specifics of the racial contact itself: personal racial predispositions in the neighborhood (largest effect) and in the workplace (second largest effect). Changes in orientations toward governmental policies to promote racial equality, while more appreciable than in Table 1, still remain modest. The net result is that among the select group of whites with sustained residential proximity to blacks and with blacks among their friends and acquaintances, the proportion with negative racial beliefs, feelings, and social predispositions is reduced to a small minority—and yet resistance to policies affirming racial equality is still found among half to two-thirds of this group.

¹³ The only two exceptions to this statement are the items "Closer to whites" and "Equal job opportunities," both of which evidence about the same degree of movement in Tables 1 and 2, although the sources of that movement are apportioned differently.

THE RELATIVE SOCIOECONOMIC STATUS OF BLACK FRIENDS

A common implicit assumption has been that the ties of friendship confer an intrinsic equality between the participants, at least within the bounds of the relationship. However, while the relationship itself does not manufacture an inequality between the participants (as in master-servant relationship), it is also possible that friendship may do nothing to erase an inequality that exists on the basis of socially important characteristics of the participants, such as race or socioeconomic status. Such a possibility is suggested by our results thus far, which indicate that interracial friendship does not have especially strong effects on racial attitudes and that support for policy efforts to promote racial equality are the most resistant to change. The pertinent issue may not be whether a personal relationship of equality is generalized to the group as a whole, but rather whether the black friend was ever an equal in the first place.

There is no way to ascertain definitively that any of the interracial friendships involve relationships between equals. However, other status characteristics of the individual friend may offset his racial status. Of these, the strongest and most visible candidate is the friend's socioeconomic status. In the classic public housing studies of Deutsch and Collins (1951) and Wilner et al. (1952), the socioeconomic status of the participants was held constant, because of the income requirements for eligibility for public housing. Thus, the residents of both races shared not only the same rights and privileges as tenants within the project, but also the same (low) socioeconomic standing, and Wilner et al. (1952: 69) identified this as an important factor in the creation of conditions conducive to attitude change.

To pursue this issue, we can subdivide the select group of whites who have black friends by the relative socioeconomic status of those friends. The frame of reference for assessing this is the mean socioeconomic status of the respondent's white friends. We assume that people are cognizant of status differentials among their friends, and that when they evaluate the traits of any individual friend the most salient reference group is the remainder of their friendship circle.¹⁴

Respondents were asked to list the occupation of each of their friends, and we used that information to derive a Duncan SEI score for

¹⁴ The only other potential reference would be the respondent's own socioeconomic status, but use of this is impractical because the resulting measure would suffer from floor and ceiling effects, depending on whether the respondent's own status was low or high. Such a measure would thus artifactually reflect the status of the respondent as well as of the friend. Since the status of friends is strongly associated with respondent's own status (Jackman and Jackman, 1983), use of the absolute status of respondent's black friends would also be confounded with respondent's own status.

each friend.¹⁵ This allows us to compare the SEI score of the respondent's black friend (or the mean black SEI score if there is more than one black friend) with the mean SEI score of that respondent's white friends. On this basis, whites with black friends are divided into three groups: those whose black friends have *lower* socioeconomic status than their white friends, those whose black friends and white friends have *similar* SEI scores (that is, within 8 SEI points), and those whose black friends have *higher* socioeconomic status than their white friends.¹⁶

If status differentials do permeate the bounds of good friendship, we should expect the impact of interracial friendship on whites' racial attitudes to be heavily dependent on the relative socioeconomic status of their black friends. Such a pattern would give an important clue to the restricted effects of personal interracial contact on whites' racial attitudes. It would suggest that social inequality between groups has a potency that is not erased by personal friendship.

Table 3 displays the percentage with conservative racial attitudes, first of whites who do not have a black friend, then of whites who do have black friends, with the latter group subdivided according to whether their black friends' socioeconomic status is lower than, the same as, or higher than that of their white friends. In view of the small *N*'s in the last three categories, we must interpret the results in Table 3 with caution. However, the patterns are remarkably consistent and pronounced.¹⁷

The relative status of black friends is a consistent influence on all aspects of whites' racial attitudes, even their policy orientations. Its

¹⁵ Data provided by respondents about their friends' occupations were sufficiently detailed to allow for the Survey Research Center two-digit occupation code, which is an abbreviated version of the three-digit 1970 Bureau of the Census occupation code. For each friend, we calculated a Duncan SEI score by taking the weighted mean SEI of the three-digit census occupations that were included in each two-digit SRC occupation category (see Jackman and Jackman, 1983, for more details). Individual friends were excluded if their occupational status was not ascertained.

¹⁶ Not surprisingly, the mean SEI differential in the Black Friend Lower Status category is greater (mean difference = 26 SEI points) than in the Black Friend Higher Status category (mean difference = 18 SEI points). In view of the small *N* and the arbitrary cutoffs between categories (± 8 SEI points), we conducted two checks. First, we experimented with two slightly different categorizations, one based on a different score of ± 7 SEI points, and one based on ratios of less than .85 and more than 1.15. The *N*'s changed slightly with each categorization, but the results were replicated. Second, we hand-checked the questionnaires of the 96 white respondents with valid occupational data for black and white friends. This check indicated that the three categories for the relative SEI of black and white friends reflect plausible, coherent distinctions.

¹⁷ As with the controls for region and age (see footnote 6 above), the results in Table 3 are not undermined when we control for whether respondents have both sustained proximity to blacks in the neighborhood and black acquaintance(s) as well as friend(s).

Table 3. Percentage of Whites with Conservative Racial Attitudes, by Whether They Have Black Friends and by the Relative Socioeconomic Status of Their Black and White Friends

	<i>No Black Friend</i>	<i>Black Friend Lower SEI</i>	<i>Black Friend Same SEI</i>	<i>Black Friend Higher SEI</i>
More whites dependable	52.5	43.8	36.1	19.0**
More whites intelligent	58.1	54.8	44.4	28.6*
More blacks lazy	37.7	40.0	27.8	14.3
Warmer toward whites	47.3	32.4	33.3	4.8**†
Closer toward whites	63.0	47.1	44.7	10.0**††
Prefer whites in workplace	55.3	34.3	28.2	27.3**
Prefer whites in neighborhood	82.2	73.5	61.5	36.4**†
Government should do <i>same or less</i> to ensure:				
Integrated schools	84.2	91.2	77.8	61.9*†
Equal housing opportunity	71.7	86.7	67.7	52.6†
Equal job opportunity	78.3	85.3	63.2	47.6**††
Base <i>N</i> (ranges)	1136-1406	30-35	31-39	19-22

* Significantly different from *No Black Friend* category ($p \leq .05$; chi-square test)

** Significantly different from *No Black Friend* category ($p \leq .01$; chi-square test)

† Significantly different from *Black Friend Lower SEI* category ($p \leq .05$; chi-square test)

†† Significantly different from *Black Friend Lower SEI* category ($p \leq .01$; chi-square test)

importance can be seen in two ways. First, having a black friend of relatively low socioeconomic status generally does little to temper whites' attitudes toward blacks. If one compares the percentages in the first two columns, the differences between whites with no black friends and whites with black friends of relatively low socioeconomic status tend to be small and irregular. Second, if one compares the percentages across the three categories of black friends' socioeconomic status, one finds an almost unbroken pattern of substantial positive change in whites' racial attitudes as the relative socioeconomic status of their black friends increases. The differences in racial attitudes between whites with lower- and higher-status black friends are generally as large as or larger than the differences observed in Table 1 between whites with no black friends or acquaintances and whites with both black friends and acquaintances. The only discrepancy is in the tendency to prefer whites in the workplace, which is more influenced by the friendship factor itself and little affected by the status of the friend. On all the other items, the percentage difference between whites with lower- and higher-status black friends ranges between 25 and 38 percentage points.

In the tendency to make negative trait distinctions, the difference is about 25 percentage points for each trait, which is not quite large enough to attain statistical significance at the .05 level with the small cell *N*'s. As a result of the consistent positive shift in trait attributions, however, only about one-seventh to one-quarter of whites with higher-status black friends make negative trait distinctions between the races. In affective differentiation between the races, in personal preferences for whites in the neighborhood, and in racial policy orientations, the differences between the second and fourth columns of Table 3 all range between 28 and 38 percentage points, and these differences are large enough to attain statistical significance at the .05 level or better. As a result, negative affect toward blacks is almost obliterated among whites with higher-status black friends, while about one-third of this group maintain a preference for whites in the neighborhood, and about one-half maintain a conservative racial policy stance. The last effect is especially noteworthy, in view of the limited effects on racial policy views observed in our earlier analyses. While almost all whites with a lower-status black friend preserve a withholding policy perspective toward blacks, there is a clear movement away from that position as their black friends have higher status. The remaining high proportion of whites with conservative racial policy views indicates, however, that it would take more than one (token) high-status black friend to achieve a radical shift in the overwhelming conservatism of whites' racial policy views.

Discussion

Our results suggest several points of divergence from the contact theory. First, while the importance of developing a variety of contacts with blacks is congruent with the contact theory, the same cannot be said of the apparent unimportance of the intimacy of those contacts. The contact theory emphasizes that contacts with duration and intimacy (such as friendships) are more motivationally compelling. We find no evidence of that. Second, the contact theory portrays prejudice and discrimination as emotionally based outgrowths of the ignorance that accompanies the physical separation of blacks and whites. From this perspective, prejudice may be seen as a tragic misunderstanding that can be set right by introducing compelling cross-group contacts. Our results do not support such an optimistic view. Instead, they suggest that whites' affective and social dispositions toward blacks change with greater ease than their beliefs about blacks, or, more dramatically, their racial policy views. Finally, the significance of the socioeconomic status of even good friends who are black is broadly consistent with the

stipulation of the contact theory that interracial contacts should take place between status equals to be effective. However, when placed in the context of our other results, and especially the resilient conservatism of whites' policy dispositions toward blacks, the meaning of the socioeconomic status factor changes. Rather than seeing this as something that can render blacks and whites equals in a particular situation or relationship, we believe its significance is that it can offset the status differential that is embedded on the basis of race. This interpretation is reinforced by the fact that racial attitudes are more positive when black friends have *higher* socioeconomic status than when they have equal status. This suggests that the critical dynamic is not that blacks and whites are rendered equals but rather that another dimension of inequality may partially balance off the nested racial inequality. That such an extrinsic factor invades even the bounds of intimate friendship reveals the pervasive force of societally defined inequalities between groups in determining the predispositions of individuals.

The policy implications of these results are less than encouraging. The lack of necessity for highly intimate contacts across racial lines is a plus, but the importance of experiencing a variety of interracial contacts is a serious drawback, since most whites who do have contact with blacks experience only token contact. Even more discouraging is the apparently critical significance of the relative socioeconomic status of black contacts. It appears that unless an increase in interracial contact is accompanied by wide-scale change in the relative socioeconomic position of blacks, it is unlikely to have a salutary effect on whites' racial policy views. Paradoxically, however, the government is unlikely to push hard for affirmative change in the relative socioeconomic standing of blacks when its primarily white constituency is so overwhelmingly opposed to such change. Stated differently, a relationship between whites and blacks that was not marked by discrimination and socioeconomic inequality would be a very different relationship from the one with which we are confronted in the United States today. The important question is not whether amicable contact can exist between groups of equal status, but whether such contact can help to foster equality between groups who have unequal status.

We propose that a more political conception of intergroup attitudes is in order. Instead of viewing such attitudes primarily as individual expressions of irrationality, parochialism, and animosity, we suggest they are a constituent part of a group's ideological defense of its interests. As the dominant group develops an ideological defense of the inequality from which it benefits, the natural inclination is to mitigate incipient challenge from subordinates through the use of amicable persuasion, rather than to heighten the conflict with a mindless reliance on

hostile negativism (Jackman and Muha, 1984). From this perspective, the empirical relationship between interracial contact and whites' racial attitudes bears on a different issue than that posed by the contact theory. The issue is not whether whites generalize to blacks as a whole from their personal experience of friendship with an individual black. Instead, the issue is how a relationship of intimacy with individual subordinates modifies the manner in which dominant-group members defend their privilege.

The idea that intergroup attitudes are energized by a collective sense of group position, rather than being simple reflections of personal, experiential factors, was suggested long ago by Blumer: "The sense of group position is the very heart of the relation of the dominant to the subordinate group. . . . To seek . . . to understand it [race prejudice] or to handle it in the arena of individual feeling and of individual experience seems to me to be clearly misdirected" (Blumer, 1958: 4, 6-7). Such a view diverges sharply from the more prevalent view of prejudice expressed in the contact theory, and, indeed, Blumer's argument went largely unattended in empirical research on intergroup attitudes. In recent years, however, some analysts have begun to pursue empirical questions that are informed by the idea of intergroup attitudes as an expression of group-level interests (e.g., Wellman, 1977; Smith, 1981; Bobo, 1983, 1984; Jackman and Senter, 1983; Jackman and Muha, 1984).

If prejudice derives not from feelings of personal animosity but from an implicit sense of group position, then dominant groups will seek to defend their privilege no matter what brand of affect they feel toward subordinates. This, in turn, implies that there is no logical connection between friendship and equality. Hacker (1951) made precisely this point about gender relations in her classic exposition on that subject. She argued that personal friendship between men and women does not portend sexual equality, and that, indeed, marriage (the ultimate point of acceptance on Bogardus' classic social distance scale) is an intimate relationship of inequality. We suggest that personal geniality may have been overrated in the analysis of racial attitudes as well. In the segregation-charged race relations of recent American history, it is easy to forget that racial privilege can be maintained as adeptly with personal relationships as with impersonal ones. The corollary is that discriminatory orientations need not rest on feelings of personal animosity. Indeed, if circumstances are conducive, discrimination can rest as comfortably on a friendly disposition as on a hostile one.

When whites experience a high degree of personal contact with blacks, feelings of personal animosity and social distance crumble. This, however, does not alter the relationship of inequality that exists

between the two racial groups and from which whites benefit. Thus, what is wrought by interracial contact is a significant modification in the *configuration* of whites' racial attitudes—indeed, they begin to resemble the configuration of men's gender attitudes. Men, who almost uniformly experience high levels of personal contact with women, tend to express positive affective dispositions toward women, while they withhold support for the promotion of women's equality. Data from the same national survey from which our racial attitude data were drawn indicate that very few men express an affective preference for men over women (in terms of either warmth or closeness), but almost two-thirds think that the government should not increase its efforts to promote equality between the sexes in legal rights or job opportunities. This is paralleled by the profile of racial attitudes among whites who have high levels of contact with blacks: that contact renders a substantial positive change in whites' personal affective and social predispositions without sweeping away discriminatory policy orientations. The latter are driven by an enduring force that is unaltered by a change in personal contact with blacks—the material and cultural interests of white racial privilege. As women have long understood implicitly, intergroup friendship increases the bonds of affection with subordinates, but it does not undercut the discrimination that defines the unequal relationship between the two groups.

Appendix A

MEASURES OF RACIAL ATTITUDES

Cognitive Differentiation Between Blacks and Whites. In a self-administered booklet, respondents were asked three pairs of questions about the trait attributes of (a) blacks and (b) whites:

How many [blacks/whites] would you say are [dependable/intelligent/lazy]?

Respondents answered by writing a number from a scale that ranged from 0 (None) through 4 (About Half) to 8 (All). We took the difference between each respondent's answer for blacks and for whites to identify respondents who think there are *more dependable whites* than blacks, *more intelligent whites* than blacks, and *more lazy blacks* than whites.

Affective Differentiation Between Blacks and Whites. These measures are also constructed from pairs of items asked in a self-administered booklet:

In general, how warm or cold do you feel toward [blacks/whites]?

In general, how close do you feel to [blacks/whites]?

Respondents answered by writing a number from a scale that ranged from 1 (Very Cold/Not at all Close) through 5 (Neither One Feeling Nor the Other) to 9 (Very Warm/Very Close). We took the difference between each respondent's answer for blacks and for whites to identify respondents who feel *warmer toward whites* than to blacks, and those who feel *closer to whites* than to blacks.

Social Predispositions Toward Blacks. These measures come from two items:

Would you personally prefer to work in a job where your co-workers are all white, mostly white, about half white and half black, mostly black, or all black?

Would you personally prefer to live in a neighborhood that's all white, mostly white, about half white and half black, mostly black, or all black?

Those who Prefer Whites in the Workplace or Prefer Whites in the Neighborhood are those who responded "all white" or "mostly white" to the appropriate question. Volunteered "No Preference" and "Don't Know" responses are coded as nondiscriminatory.

Racial Policy Orientations. These measures come from three pairs of questions:

How much do you think the federal government is doing to [policy statement]? A lot, Quite a Bit, A Little, or Nothing?

How much do you think the federal government *should be* doing about this? A Lot, Quite a Bit, A Little, or Nothing?

The three Policy Statements are:

Make sure that blacks and whites go to the same schools.

Make sure that blacks can buy any house on the market that they can afford.

Make sure blacks have the same job opportunities as whites.

We took the difference between each respondent's answers to the two questions in each pair to identify those who think the government *should be doing less* than it is now, the *same* as it is doing now, or *more* than it is doing now to promote *integrated schools, equal housing opportunities, and equal job opportunities*. Respondents with "Don't know" or missing data on either item in a pair were excluded.

NOTE: Use of the policy "should" items alone, instead of the policy difference scores, does not alter the pattern of results reported in this article.

Appendix B

SUPPLEMENTARY EVIDENCE ON SELF-SELECTION VERSUS UNSOLICITED PROXIMITY TO BLACKS

1. *Proximity and Friendship.* Table 4 displays, for white respondents, the level of informal interaction with blacks in the neighborhood, the racial composition of acquaintances, and the number of black friends, as a function of the racial composition of the current neighborhood of residence and the presence or absence of blacks in any previous neighborhood of residence. Comparable data are available for the workplace, and they yield similar results to those reported for the neighborhood, the only difference being the generally higher levels of interracial interaction in the workplace (which is consistent with our view that the workplace facilitates social interaction more than does the neighborhood).

The results in Table 4 suggest that once whites find themselves in an interracial situation, their patterns of social interaction gradually succumb to the intrinsic pressures of prolonged and frequent exposure to blacks, according to the same principles that determine sociometric patterns more generally. The strength of the relationship is underscored when one considers the partial nature of our measures of proximity: the actual physical proximity and accessibility of black families in the neighborhood would vary considerably, with many cases presenting only limited social opportunities.

The effects of both current and previous exposure to blacks on the likelihood of engaging in neighborly activities with blacks in the current neighborhood of residence suggest a cumulative process whereby whites with more interracial experience find it easier to establish contact when they encounter blacks subsequently. The combined effects of previous and current neighborhood proximity produce a large percentage difference between the two "ends" of the table. Among whites whose current neighborhood is "mostly white" and who have not previously lived in a neighborhood with any black residents, only 18 percent ever engage in neighborly activities with their black neighbors. In contrast, among whites with both some past neighborhood proximity and a current neighborhood that is half black or more, almost 60 percent interact with their black neighbors. The comparable figures for workplace proximity are 45 percent and 80 percent.

Table 4. Percentage of Whites Who Interact with Blacks, as a Function of Past Exposure to Blacks in the Neighborhood and Racial Composition of Current Neighborhood

<i>Current Neighborhood</i>	<i>Previous Neighborhood No Blacks</i>			<i>Previous Neighborhood One or More Blacks</i>		
	<i>All White</i>	<i>Mostly White</i>	<i>Half Black or More</i>	<i>All White</i>	<i>Mostly White</i>	<i>Half Black or More</i>
<i>Neighborly activities w/blacks in neighborhood</i>						
Never	—	82.0	67.9	—	72.4	40.5
Not too often	—	10.4	3.6	—	12.4	24.3
Sometimes	—	5.5	21.4	—	9.5	21.6
Very often	—	2.2	7.1	—	5.7	13.5
<i>N</i>	0	183	28	0	210	37
<i>Race of acquaintances</i>						
All white	89.7	73.0	71.4	80.6	61.3	32.4
Mostly white	10.0	24.3	25.0	18.5	34.9	59.5
Half black or more	0.3	2.7	3.6	0.9	3.8	8.1
<i>N</i>	602	226	28	438	261	37
<i>Black friends?</i>						
None	96.4	87.7	78.6	90.4	82.7	80.6
One	2.5	9.1	10.7	7.1	9.2	8.3
Two or more	1.0	3.2	10.7	2.5	8.1	11.1
<i>N</i>	590	220	28	436	260	36

The likelihood of interracial acquaintanceship is heavily determined by proximity to blacks. Among whites with no past or present proximity to blacks in the neighborhood, very few—only 10 percent—have any black acquaintances; this figure jumps to 68 percent among whites with both some previous neighborhood proximity to blacks and current residence in a neighborhood that is half black or more (second panel of Table 4). The comparable figures for workplace proximity are 7 percent and 44 percent. The influence of neighborhood proximity on interracial friendship seems less pronounced, although if one takes account of the small proportion of whites overall with black friends, the relationship is far from trivial. Ranging from 3.5 percent in the extreme lefthand column of Panel 3 to 19.4 percent in the extreme righthand column, this represents a ratio of almost 6 to 1 in favor of having a black friend at higher versus lower levels of neighborhood proximity. In the work context, the comparable percentages are 2 and 26 (or a ratio of more than 12 to 1 favoring interracial friendships at high proximity levels).

2. *Interracial Contact and Racial Attitudes.* Several aspects of the relationship between interracial contact and whites' racial attitudes contradict the logical expectations of the self-selection thesis, and thus reinforce our assumption that interracial friendships develop primarily from factors that are independent of initial racial attitude. We briefly identify the pertinent results from Tables 1, 2, and 3.

i. The overall relationship between our various measures of interracial contact and racial attitudes is neither strong nor uniform enough to provide support for the self-selection thesis. Tables 1 and 2 indicate that a significant portion of whites with high levels of interracial contact have negative racial attitudes. This contradicts the idea that whites with positive attitudes seek personal contact with blacks or that whites with negative attitudes avoid such contact.

ii. Table 1 indicates that the relationship between contact and attitudes is the same, whether the contacts are casual acquaintances or more intimate friends. If self-selection bias were operating, whites with black friends would have more positive racial attitudes than those whose relationships with blacks did not extend beyond casual acquaintance.

iii. The mutually reinforcing effects of proximity and personal association reported in Table 2 undermine the idea that whites with negative racial attitudes either avoid neighborhoods with blacks in them or avoid interacting with blacks in those neighborhoods. If the first type of avoidance were taking place, negative racial attitudes would be absent or near absent among all white residents of interracial neighborhoods. If the second type of avoidance were taking place, the white residents of interracial neighborhoods who make *no* personal contact with blacks would have more *negative* racial attitudes than a cross-section of whites who have had no exposure to blacks (because those in the interracial neighborhood with positive attitudes would have self-selected into personal relationships with blacks). The data in Table 2 offer no evidence for either of these expectations. Instead, whites who experience either proximity or personal contact without the reinforcement of the other have essentially the same profile of racial attitudes as whites with no exposure to blacks.

iv. The relationships reported in Table 3 between the socioeconomic status of black friends and whites' racial attitudes undermine the plausibility of the self-selection thesis. It is implausible to posit that whites' racial attitudes determine the relative socioeconomic status of the blacks with whom they become friendly. The implausibility of such a proposition is underscored by the fact that whites with lower-status black friends do not display systematically more negative attitudes than whites with no black friends (that is, there is no evidence that whites "sort" into high- and low-status friendships according to whether their racial attitudes are more positive or negative than average).

References

- Allport, Gordon W.
1958 *The Nature of Prejudice*. New York: Anchor.
- Amir, Yehuda
1969 "Contact hypothesis in ethnic relations." *Psychological Bulletin* 71(May):319-42.
- Berscheid, Ellen, and Elaine Hatfield Walster
1969 *Interpersonal Attraction*. Reading, MA: Addison-Wesley.
- Blumer, Herbert
1958 "Race prejudice as a sense of group position." *The Pacific Sociological Review* 1(Spring):3-7.
- Bobo, Lawrence
1983 "Whites' opposition to busing: symbolic racism or realistic group conflict?" *Journal of Personality and Social Psychology* 45:1196-1210.
1984 *Racial Hegemony: Group Conflict, Prejudice, and the Paradox of American Racial Attitudes*. Unpublished doctoral dissertation, Department of Sociology, University of Michigan.
- Brophy, I. N.
1945 "The luxury of anti-Negro prejudice." *Public Opinion Quarterly* 9:456-466.
- Cook, Stuart W.
1963 "Desegregation: a psychological analysis," in W. W. Charters, Jr., and N. L. Gage (eds.), *Readings in the Social Psychology of Education*. Boston: Allyn and Bacon.
- Deutsch, Morton, and Mary Evans Collins
1951 *Interracial Housing: A Psychological Evaluation of a Social Experiment*. Minneapolis: University of Minnesota Press.
1965 "The effect of public policy in housing projects upon interracial attitudes." Pp. 646-657 in Harold Proshansky and Bernard Seidenberg (eds.), *Basic Studies in Social Psychology*. New York: Holt, Rinehart, and Winston.
- Farley, Reynolds, Toni Richards, and Clarence Wurdock
1980 "School desegregation and white flight: an investigation of competing models and their discrepant findings." *Sociology of Education* 53 (July):123-139.
- Festinger, Leon
1951 "Architecture and group membership." *The Journal of Social Issues* 7:152-163.

- Festinger, Leon, Stanley Schachter, and Kurt Back
 1950 *Social Pressures in Informal Groups: A Study of Human Factors in Housing*. New York: Harper and Brothers.
- Hacker, Helen Mayer
 1951 "Women as a minority group." *Social Forces* 30:60-69.
- Hallinan, Maureen T.
 1982 "Classroom racial composition and children's friendships." *Social Forces* 61 (September):56-72.
- Hallinan, Maureen T., and Stevens S. Smith
 1985 "The effects of classroom racial composition on students' interracial friendliness." *Social Psychology Quarterly* 48(March):3-16.
- Hamilton, David L., and George D. Bishop
 1976 "Attitudinal and behavioral effects of initial integration of white suburban neighborhoods." *The Journal of Social Issues* 32 (2):47-67.
- Hodge, Robert W., and Donald J. Treiman
 1968 "Class identification in the United States." *American Journal of Sociology* 73 (March):535-47.
- Jackman, Mary R., and Robert W. Jackman
 1983 *Class Awareness in the United States*. Berkeley and Los Angeles: University of California Press.
- Jackman, Mary R., and Michael J. Muha
 1984 "Education and intergroup attitudes: moral enlightenment, superficial democratic commitment, or ideological refinement?" *American Sociological Review* 49 (December):751-69.
- Jackman, Mary R., and Mary S. Senter
 1983 "Different, therefore unequal: beliefs about trait differences between groups of unequal status." Pp. 309-35 in Donald J. Treiman and Robert V. Robinson (eds.), *Research in Social Stratification and Mobility*, vol. 2. Greenwich, CT: JAI Press.
- Marx, Karl
 1964 *Karl Marx: Selected Writings in Sociology and Social Philosophy*, edited and translated by T. B. Bottomore. New York: McGraw-Hill.
- Myrdal, Gunnar
 1944 *An American Dilemma*. New York: Harper and Brothers.
- Polsby, Nelson W.
 1980 *Community Power and Political Theory*, second edition. New Haven, CT: Yale University Press.
- Smith, A. Wade
 1981 "Racial tolerance as a function of group position." *American Sociological Review* 46 (October):558-73.
- Stouffer, Samuel A., and others.
 1949 *The American Soldier*, volume 1. Princeton, NJ: Princeton University Press.
- de Tocqueville, Alexis
 1969 *Democracy in America*. New York: Anchor Books.
- Vander Zanden, James W.
 1984 *Social Psychology*. New York: Random House.
- Wellman, David T.
 1977 *Portraits of White Racism*. New York: Cambridge University Press.
- Williams, Robin M., Jr.
 1964 *Strangers Next Door: Ethnic Relations in American Communities*. Englewood Cliffs, NJ: Prentice-Hall.
- Wilner, Daniel M., Rosabelle Price Walkley, and Stuart W. Cook
 1952 "Residential proximity and intergroup relations in public housing projects." *The Journal of Social Issues* 8:45-69.
- 1955 *Human Relations in Interracial Housing*. Minneapolis: University of Minnesota Press.

Yuppies

JOHN L. HAMMOND

THE MEDIA have reported the emergence of a new political species: the Young Urban Professionals, children of the baby boom who now have college degrees and high-paying jobs. The huge birth cohorts of the baby boom were said to share some important formative experiences; childhoods of prosperity, high educational levels, and now, occupational attainments and salaries which match their ambitions. According to press accounts, they crowd the country's labor and real estate markets, health clubs, and boutiques. A leading newsweekly proclaimed 1984 their "year" (*Newsweek*, 1984), and declared that they were becoming the dominant political and cultural force in American society.

Their politics appears to be new, too—conservative, but not on all issues. Media accounts, though impressionistic, have suggested that yuppies reject high taxes, social spending, and government regulation, the New Deal economic agenda. But they are liberal on issues of personal freedom and lifestyle, especially sexual and gender freedom: they support equal rights for women; they reject restrictive sexual mores, and accordingly endorse freedom of sexual preference and

Abstract According to widespread press reports, the Young Urban Professionals—members of the baby boom generation with college educations and high-paying jobs—are becoming a dominant political and cultural force in American society. While accounts of their attitudes are impressionistic, most suggest that they adopt liberal positions on issues of personal freedom but reject the socioeconomic liberalism of the New Deal and the 1960s. Analysis of the General Social Surveys from 1982 to 1984, however, shows that while the presumptive yuppies are more liberal than the general population on issues of personal freedom, they are not particularly conservative on social welfare issues. The differences are explained by their youth and higher education rather than by any distinct yuppie attitude syndrome. Some possible causes of the mass media's infatuation with a perhaps mythical yuppie are discussed.

John L. Hammond is Professor of Sociology at Hunter College and the Graduate Center of the City University of New York. The author expresses appreciation for the helpful comments of Al Gollin, Bernie Lefkowitz, Pam Stone, Gaye Tuchman, and Mike Wood.

abortion rights. Finally, the media have pictured yuppies as materialistic, but not out of economic insecurity; rather, they are economically privileged and they take advantage of it.

But there is precious little evidence for this characterization, despite its widespread acceptance. As I will show, data from the recent General Social Surveys demonstrate that yuppies are as liberal, or more so, as the rest of the population on both lifestyle and economic issues. I will then consider why the unsubstantiated view has been so widely reported.

Sixties Going on Eighties

Those who attribute a unique pattern of beliefs to the yuppies argue that a number of trends in American culture generally and in baby boomers' lives converged to create it. Cultural restrictions have loosened. Many accounts suggest that as confidence in national institutions has been declining for two decades, personal fulfillment has become a dominant theme of the culture. People today are much more likely to find satisfaction in self-expression than in fulfilling social roles or adhering to institutional requirements (Bellah et al., 1985; Turner, 1976; Veroff et al., 1981; Yankelovich, 1981). These preoccupations have spawned a plethora of self-help movements and new forms of psychotherapy.

This loosening of cultural restraints is manifest in feminism: the belief in equal rights for women, the breakdown of traditional gender roles, and the access of women to new, if not precisely equal, opportunities. Closely related is the revolution in sexual mores: the apparent decline in the double standard and the growing belief that sexual preference (for partners of the same or the opposite sex, for one or many partners, for the traditionally sanctioned or more adventurous forms of sexual contact) is a matter of individual choice.

These new norms burst forth in the 1960s as part of a movement which was antiauthoritarian and politically left. The term *yuppie* resonates, after all, because it evokes the Yuppies who nominated a pig for president in 1968. The affluent Flower Children, encouraged to believe that they could accomplish whatever they wanted, demanded freedom from restrictive norms. But they also demanded equal opportunity and a decent standard of living for minority groups, and fuller democratic and communal participation in decision making; they rejected wealth as the standard of social status. Some suggested that a "postmaterialist" value system was emerging appropriate to a postindustrial society where material needs were largely met (Inglehart, 1977).

But media accounts suggest that yuppies are different: they are non-

conforming and antiauthoritarian, but they are also very concerned with income, consumption, and possessions. As Jones puts it, it is "as if the Woodstock mentality had somehow merged with the Bloomingdale mentality" (1981: 317).¹ Moreover, as mentioned above, they are said to oppose the economic liberalism of the New Deal. While commentators do not say so directly, many imply that yuppies' materialism and their economic conservatism go together: they reject New Deal liberalism *because* they are materialistic and self-serving (Boaz, 1985; Newsweek, 1984: 28-31). In a decade, they seem to have passed from the Greening of America to Looking Out for Number One.

Several events in the national political culture and in their own lives might have brought about this change. Declining trust in political institutions, generally attributed to the Vietnam War and to Watergate, may have led people to oppose all forms of government intervention. While these events affected everyone, they presumably affected the young most, because young people were getting their first exposure to politics. Further, traditional liberalism has lost its appeal. Social change, activist government, and the welfare of the underprivileged were long felt to go together. For many, they no longer do (Abramson, 1983: 181-82, 233-34; Jennings and Niemi, 1981: 203-11, 226; Mannheim, 1969; Smith, 1981).

The present apparent economic conservatism of the baby boom generation may derive from disappointed economic expectations, just as the behavior and beliefs of flower children grew out of affluence. Stagflation subverted liberalism's promise of unending prosperity, and competition for jobs was intense because their cohort was so big. Easterlin argues that the size of a birth cohort affects its members' life chances, and consequently their attitudes and behavior. For the members of a large birth cohort, competition on entry to the labor market is so intense that they become pessimistic, marry late, and have small families (1980: 3-79). While Easterlin does not discuss political attitudes, his argument suggests that yuppies (presumably the baby boomers with the greatest ambitions and thus the greatest disappointment) should feel a pessimism and self-absorption which would account both for their rejection of conventional norms and their economic conservatism.²

¹ At least one source disagrees: according to Price, while baby boomers are embracing traditional values in some areas, they have "a desire for less materialism" (1984: 31). Only baby boomers were interviewed in the survey she reports, however; she presents no data comparing them to their elders.

² I do not use the terms *yuppie* and *baby boomer* interchangeably. The latter term is more inclusive, referring to everyone born between 1946 and 1964. The former, while less precise, refers to those in the baby boom cohort who meet some (not usually specified) education and/or income criterion. I refer to baby boomers when citing find-

Alternatively, the combination of lifestyle liberalism and economic conservatism might be accounted for more simply. Academic surveys of voting and public opinion in the 1950s and 1960s commonly found that people of low status were economic liberals for reasons of simple self-interest, while those of high status had education and "sophistication" which made them liberal on other issues, often referred to as issues of "style" (Berelson et al., 1954: 184-85; Campbell et al., 1964: 113-21; Lipset, 1963: 103-04, 318-22). The "style" or noneconomic category encompassed a different set of issues than today—foreign policy and civil rights. (It is striking that as recently as the 1950s, foreign policy and civil rights could be called style issues because they seemed to engage voters' abstract values, not their immediate self-interest!) But it is even more plausible that the well-educated and sophisticated would be liberal on the lifestyle issues which have emerged in recent years (as has been found by Knoke, 1979).

The hypothesized yuppie syndrome would contradict other findings indicating that both youth and education make people more liberal. Stouffer, studying tolerance of nonconformists, argued that education has a liberalizing effect on attitudes and age a conservatizing effect (1955). Davis (1975), replicating Stouffer's study two decades later, likewise finds the young and the well-educated to be most liberal; however, though his younger cohorts were more tolerant than their elders, he finds no evidence for an aging effect and rather argues that the age difference is a cohort effect.

Davis finds the young and well-educated to be more liberal on a variety of attitudes: not just on tolerance of nonconformity but on lifestyle issues as well, and on the General Social Survey federal spending questions, which are clearly related to New Deal liberalism (Davis, 1975 and 1980). These findings would weigh against the hypothesis that yuppies, while liberal on issues of personal freedom, are conservative on economic issues.

Hypotheses

Let us spell out more formally some of the competing hypotheses about the yuppie attitudinal syndrome. These hypotheses distinguish between lifestyle issues (broadly, sexual and gender liberation) and

ings (such as Easterlin's) which refer to the entire cohort. I have read no such "findings" on yuppies, only speculations for which the reference group is not clearly identified. In my own analysis below, I do not define who is or is not a yuppie (except in a preliminary analysis); instead, I examine the effects of cohort, education, income, and place of residence separately.

economic issues (social spending and government responsibility for economic welfare).

1. The pure yuppie hypothesis: yuppies (i.e., well-educated, well-off, urban members of the baby boom generation) are more liberal than the rest of the population on issues of lifestyle, more conservative on economic issues. Because this difference is due to cohort size, there are interactions between cohort membership and the variables which determine attitudes of older people. Not only are members of the baby boom cohort and people who live in cities and have higher education and income most likely to manifest economic conservatism and lifestyle liberalism, but the effect of education, income, and urban residence on both sets of attitudes is greater for them.³

2. The bifurcation hypothesis: economic conservatism and lifestyle liberalism are determined by high SES. This hypothesis is consistent with the media depiction of the yuppie attitude syndrome. It differs from the "pure" yuppie hypothesis, however, in that it gives no special place to generational membership—yuppies have the attitudes they have not because of any cohort experience, but because education, income, and urban residence have the same effect on their attitudes as on those of the older population.

3. No yuppie difference: the Stouffer/Davis hypothesis predicts that education and youth are associated with liberalism on all issues. Neither cohort size nor coming of age in the 1960s and 1970s has had a unique effect—at least, they have not had the effect widely attributed to them.

The first two hypotheses, while predicting the same pattern of attitudes, predict differences in the causal structures which determine those attitudes. The pure yuppie hypothesis predicts that demographic variables interact to determine attitudes: more education, for example, has a much greater liberalizing effect on the sexual attitudes of the young than it has for the old or middle-aged. The bifurcation hypothesis merely predicts that wealthy, well-educated urbanites differ in attitudes from the rest of the population, but that the determinants of those attitudes are the same.

According to the third hypothesis, the media claim of yuppie conservatism on economic issues is wrong. Regardless of whether the same variables determine the attitudes of yuppies and others, according to this hypothesis, yuppies are not more conservative than the rest of the population on any issues.

³ An interaction would be consistent with the hypothesis that cohort size has an effect. But it would not by itself *demonstrate* any such effect, for it might be due to other characteristics of the cohort, such as the historical circumstances of the period when it came of age.

Methods

The hypotheses were tested on the data of the 1982, 1983, and 1984 NORC General Social Surveys. While the first two were conducted before the yuppies were widely identified as a social group, it is unlikely that their distinctive opinions, if any, were formed in the space of a year or two.

By a loose definition—anyone born after 1945 with a college degree—yuppies make up 8.4 percent of the sample in the 1983 General Social Survey. By criteria closer to those implied by *Newsweek* in its yuppie cover story (1984: 16)—born after 1945 and now earning at least \$35,000 in a professional or managerial occupation—they represent a mere 1.1 percent. The present analysis (except its preliminary stage), however, does not rely on any particular definition. Rather, it examines the effects on attitudes of those variables that define the term *yuppie*.

To select attitude variables for analysis, I first examined the zero-order differences in attitude between yuppies (defined as anyone with a bachelor's degree born in 1946 or later) and others on several issues suggested by press accounts. Items for which the difference yielded a gamma greater than .10 were examined further. Scales were formed from several sets of items, most of them related to lifestyle issues: attitudes toward tolerance of pornography, feminism, sexual freedom, nonconformist values for children, and abortion as a method of contraception.⁴ Items which formed scales of liberalism on social spending and government intervention also showed substantial difference between yuppies and non-yuppies. (The scaling procedure and the items included in each scale are described in the Appendix.) Yuppies had nearly the same opinions as the general population on questions related to war and militarism, federal spending on social welfare or for cities, and (for the most part) racial issues.

I analyzed the effects on each scale of age, education, income, and urban residence.⁵ To increase the sample size, I included the 1982 and/or 1984 General Social Survey samples whenever the same items were

⁴ In general, people are far more accepting of abortion if the woman was raped or if the child is likely to have a birth defect than if the woman wants an abortion because she is unmarried, wants no more children, or is poor. I refer to the latter set of reasons as the respondent's attitude to abortion as a method of contraception.

⁵ I also examined the effects of occupation, dichotomizing between professionals and others. It had no significant effects, and I have omitted it from the tables even though it is part of the definition of yuppie. Its lack of effect might be due to the fact that while yuppies are called professionals, the occupations most identified with the status are not professional but management occupations; the more likely reason is that the effects of occupational level on attitudes usually turn out to be effects of education and income and disappear when the latter two are controlled.

present. Age was measured in years and then as a pair of dummy variables representing the baby boom cohort (born in 1946 or later, thus including a small number of post-baby boomers) or its immediate predecessor (born between 1933 and 1945). The cohort definition was intended to test whether being in the baby boom cohort has an effect distinct from that of age in general; the second cohort dummy was included to allow for the possibility (though it is not mentioned in the literature) that the yuppies differ from their immediate elders more than from the population as a whole. If age once had a uniform liberalizing effect but no longer does, the middle cohort might be more liberal than either their elders or the baby boom cohort.

Findings

Table 1 presents three regression analyses of each lifestyle issue scale. The first examines the effects of education, family income, urban residence, and two dummy variables for baby boom cohort and middle cohort.⁶ The second tests for an interaction between membership in the baby boom generation and income, education, or urban residence.⁷ In the final equation age is measured in years, to determine whether the effect of cohort membership could be equally well explained as a linear effect of age.

The pure yuppie hypothesis does not fare very well by these tests. There is little sign either of any interaction effect or even of a distinct generational effect. Consider the equations for tolerance of pornography in Table 1: the first column shows that education and urban residence both affect a respondent's attitudes toward pornography, and that younger people are more accepting than people of middle age, who are in turn more accepting than older people.

The second equation tests for an interaction between membership in the baby boom cohort and income, education, or urban residence. A positive coefficient for an interaction term would mean that education, income, or urban residence had a greater effect on younger people's

⁶ Income, aggregated in the survey data, was turned into an intervally scaled variable by assigning to each respondent the category midpoint; respondents in the lowest category (below \$1000) were arbitrarily assigned \$750; those in the highest category (\$50,000 and up) were arbitrarily assigned \$60,000. To correct for inflation, these values were inversely weighted by the Consumer Price Index for the year before the survey year.

Urban residence was defined dichotomously; all those who lived in a large central city (over 250,000) or its suburbs, or a medium-sized central city (50,000 to 250,000) were classified as urban.

⁷ Interactions for the middle-cohort dummy variable were also tested, but none were found worth reporting. Similarly, there were no higher-order interactions of any consequence among the variables included in the regressions reported.

Table 1. Effect of Education, Income, Urban Residence, and Age/Cohort on Lifestyle Issues (Raw Regression Coefficients)

Independent Variable	Tolerance of Pornography	Feminism	Sexual Freedom	Value Children's Nonconformity	Contraceptive Abortion
Education	.095*	.220*	.151*	.166*	.235*
Income	.003	.002	.016*	.179*	.161*
Urban	.394*	.014*	.025*	.009*	.017*
Baby boom cohort	1.793*	.192	.305*	.213	.855*
Middle cohort	1.151*	1.392*	1.461*	.539*	.919*
Interaction: baby boom by education	-.005	.987*	.858*	.496*	.274*
Interaction: baby boom by income	-.009	-.050	-.074	.310*	.044
Interaction: baby boom by urban	-.013	-.016*	-.021*	-.034	.189*
Age				-.001	-.030*
Intercept				-.010	-.163
Adjusted R ²					
(N)					
	-.049*	-.040*	-.043*	-.013*	-.006
	1.836*	2.582*	11.730*	-2.772*	-16.508*
	.112	.160	.130	.091	.085
	(2534)	(2058)	(2920)	(1437)	(4099)

* Coefficient more than twice its standard error.

Table 2. Effect of Education, Income, Urban Residence, and Age/Cohort on Economic Issues, Party Identification, and Liberalism/Conservatism (Raw Regression Coefficients)

Independent Variable	Social Spending	Government Intervention	Party Identification	Liberal Conservative
Education	.042*	-.124*	-.083*	.006
Income	-.011*	-.019*	-.015*	-.005*
Urban	.615*	.186*	.333*	-.004*
Baby boom cohort	1.001*	.457*	.051	.192*
Middle cohort	.630*	.266*	.243*	.382*
Interaction: baby boom by education	.060*	.006	.041	.234*
Interaction: baby boom by income	-.006	.000	.008*	.250*
Interaction: baby boom by urban	-.153	-.216	-.278*	.043*
Age				-.001
Intercept				-.040
Adjusted R ²				
(N)				
	-.028*	-.013*	-.003	-.010*
	-8.246*	-2.702*	4.643*	3.615*
	.082	.125	.047	.024
	(3112)	(2575)	(4417)	(3590)

* Coefficient more than twice its standard error.

tolerance than it did for older people. But all the coefficients are negative (though not statistically significant).

The third equation tests for the effects of age in years. If the model in the first column explains significantly more variance than this model, membership in either the baby boom cohort or the middle cohort exerts a generational effect. The coefficients in the first model show a monotonic increase in tolerance from the oldest to the youngest group. The comparison of the adjusted R^2 for the two models confirms that the effect of age is linear, because the third model has a slightly larger adjusted R^2 (the adjusted R^2 takes into account degrees of freedom, so two adjusted R^2 s are comparable even if based on different numbers of independent variables).

Results are similar for feminism and sexual freedom. For both, there is a statistically significant interaction between income and membership in the baby boom. But it is negative, meaning that income has more of a liberalizing effect for older people than for baby boomers.

The analysis of a scale of items reflecting preference for nonconformist behavior in children gives similar results, except for a curvilinear effect of age, but not one which singles out baby boomers. They and the middle cohort are nearly identical, more liberal than the oldest cohort (as the coefficients of the two dummy variables in the first column reveal).

The analysis of attitudes on abortion as a means of contraception, in the last section of Table 1, offers some (mixed) support for the pure yuppie hypothesis. The youngest cohort is more approving than the middle and older cohorts, as the first model shows, and the interaction model shows that it is the best-educated baby boomers who most support contraceptive abortion. The interaction effect for income, however, goes in the opposite direction.

Lifestyle attitudes offer little support for the pure yuppie hypothesis: the lack of interactions (except in the case of contraceptive abortion) suggests that yuppies are no more liberal than can be expected from their age, education, income, and place of residence. Those attitudes do conform to the bifurcation hypothesis, but do not distinguish between it and the hypothesis of no yuppie effect, because those two hypotheses only differ in their predictions regarding economic issues.

Table 2 reports findings regarding economic issues. If the media accounts are correct, yuppies should be opposed to higher federal spending on education, on the environment, and to improve the condition of blacks. But the first section of Table 2 shows that the youngest cohort is considerably more favorable to spending for these purposes than its elders. Though there is a small interaction between baby boom

cohort and education, it goes in the wrong direction for the yuppie hypothesis. The third column, in any case, shows that the effect of age is linear.

Spending on education and the environment, if not spending to improve the condition of blacks, might represent a "postindustrial" liberalism (although factor analysis showed that the three variables clustered). The issues analyzed next, however, represent traditional liberalism: agreement that the government should reduce income differentials and that it should solve problems rather than leaving them to the private sector. On government intervention, the well-educated are less liberal than the less well-educated; but it is the youngest cohort which is most liberal.

Table 2 reports the analysis of party identification, with results almost identical (though weaker) to those for government intervention. (A positive score represents identification as a Democrat.) The middle cohort is most Democratic, but the youngest cohort is slightly more Democratic than the oldest. On government intervention and party identification, in contrast to social spending, the better educated (young and old) are more conservative; but the young are not more conservative than the old.

Finally, Table 2 presents the analysis of self-definition as liberal or conservative (an ambiguous variable: people locate themselves on the basis of very different issues (Robinson and Fleishman, 1984), but I present the results because so much of the discussion of yuppie attitudes has been couched in terms of liberalism and conservatism). The multiple correlation coefficient is quite low. But the effects of baby boom cohort and education are positive: yuppies regard themselves as more liberal than the population as a whole, and even than their immediate elders.

Yuppies—A Media Mirage?

These data thus provide almost no evidence for the pattern of yuppie attitudes predicted by both the pure yuppie hypothesis and the bifurcation hypothesis. Unfortunately, the General Social Survey is silent on the attitudes dearest to the yuppies of the media image, physical fitness and consumerism. But while the young and well-educated are liberal on lifestyle issues, their vaunted conservatism on economic issues has failed to materialize.

For a brief period during 1984 and 1985, stories about yuppies and their unique political views filled the press, without much evidence or serious examination. The term apparently first appeared in 1983 in the *East Bay Express* (Kahn, 1983). It became current as a description of

the people who voted for Gary Hart in the 1984 primaries, especially in New Hampshire and Massachusetts. According to Dotty Lynch, Hart's chief pollster, news reports attributed the term to the Hart campaign staff, but she first heard it when she read those reports (personal communication). Media attention to the yuppies was short-lived: by mid-1985, journalists (including the writer who coined the term) were declaring the yuppie phenomenon over (Kahn, 1985; cf. Dowd, 1985). None of the obituaries, however, questioned the accuracy of the earlier accounts.

How can we explain the short life, untimely death, and general inaccuracy of the media's image of the yuppie? The yuppies' reputation for conservatism may have been due to the absence of the radical politics so visible among the youth (perhaps some of today's yuppies themselves) of a decade or two ago. But I suspect that a more important factor was at work: the image did not receive careful scrutiny because it plausibly explained a lot of observations and because it provided an opportunity to practice common journalistic routines.

Yuppies came of age in imposing numbers. They visibly transformed the American cityscape with health clubs, gourmet delis and remodeled houses. In the process they became a marketing target, and since newspapers, magazines, and television are marketed, journalists had to pay attention to them. At the same time, another trend appeared to be occurring which demanded explanation: a rightward drift in public opinion.⁸ It was easy to believe that the yuppies were responsible, as they practiced a conspicuous consumption often associated with conservative opinions.

Post hoc ergo propter hoc. But the yuppie story not only seemed to explain a conservative trend; it fit the patterns of journalistic storytelling. Journalists characteristically structure stories around events

⁸ The extent to which public opinion is becoming more conservative is itself a subject of controversy, but one beyond the scope of this article. Some argue that the trend is strong; others see a waning, but not a reversal of liberalism. Still others argue that the election and reelection of Ronald Reagan create the appearance of a conservative tide, but that his electoral success depends not on ideological conservatism but on other short-term factors. See, e.g., Davis, 1980; Himmelstein and McRae, 1984; Lipset, 1985; Miller and Shanks, 1982; *Public Opinion*, 1984; Russett and DeLuca, 1981; Smith, 1981.

If public opinion is in fact becoming more conservative, it may be that the yuppies are moving in the same direction as the whole population, but no farther or more quickly. Davis (1980) argues that a conservative shift can be detected, but that—up to 1978 at least—it was no more pronounced in one demographic group than any other. The evidence presented in this article does not suggest any conservative trend among the young. The youngest cohort is the least conservative on two of the attitudes analyzed in Table 2, and less conservative than the oldest generation on the third (party identification).

rather than issues (Tuchman, 1978). The arrival of the yuppies qualified as an event; it could be dramatized and visualized. With the image of the yuppie, the conservative drift could be personalized and precisely located on Columbus Avenue or in Back Bay.

If the media image of yuppies offered an intellectually satisfying answer to some difficult questions, the press's infatuation with that image was probably due as well to a social process common among journalists. Newspeople are prone to "pack journalism," especially when they do not fully understand something: "stories spread horizontally, from news organization to news organization. . . . A critical mass of attention heaps up; then [a story] 'cannot be ignored' " (Gitlin, 1980: 99-100). Its currency elsewhere in the media gives it a veneer of "objectivity" which legitimizes its presence in a reporter's story.

It was easy to find isolated examples apparently supporting the claims made about yuppies, but normal journalistic routines do not lend themselves to testing a claim about the opinions of an ill-defined social group, and journalists are not very well versed in the social science methodology which would enable them to verify it (Singer and Endreny, 1986). If most journalists do not have those tools, the public has them even less. When we are puzzled by something new, we select from the many experiences available to us those that apparently provide the best explanation; and among those experiences are the media reports themselves. When an explanation is repeated in the media as often as the yuppie explanation was, it takes on a self-fulfilling character; news accounts corroborate each other and legitimize the story in the minds of readers and viewers, who then recognize some of its elements in their own experience. A member of the media-attentive public, strolling down the street and spotting a jogger, can reflect, "Yes, the country is becoming more conservative."

The belief may have been self-confirming for politicians and lawmakers as well, many of whom are eager to cater to what they perceive as demands for cutbacks in government services and economic assistance. Today's young people are not necessarily opposed to such government programs. They want no restrictions on their lifestyles, but they have not totally abandoned the social concerns that inspired the young in the past.

The rapid spread of the yuppie story and its equally rapid disappearance are themselves grounds for suspecting that its diffusion was due to a social process rather than a process of verification. No social group adopts, or abandons, a common culture overnight. The yuppies were not born yesterday, after all—some have reached 40, and anything that is said about them, however recently discovered, has proba-

bly been true (or false) for longer than most journalists have been aware of it.

Appendix: Scale Construction

Each scale is the sum of the standard scores of its items, each item weighted so that a positive score represents liberalism. The survey years in which all the items for each scale (and the single-item indicators) appear, and each item's mnemonic and abbreviated question wording, are listed below.

TOLERANCE OF PORNOGRAPHY (1983, 1984)

PORNLAWS	Laws against distribution of pornography
PORNMORL	Pornography leads to breakdown in morals
PORNRAPE	Pornography leads to rape
XMOVIE	Seen X-rated movie in last year

FEMINISM (1983, 1984)

FEHOME	Women take care of home not country
FEPOL	Women not suited for politics
FEPRES	Vote for woman president
FEWORK	Should women work

SEXUAL FREEDOM (1982, 1983)

PILL	Birth control information should be available
TEENPILL	Birth control info available to teens
SEXEDUC	Sex education in public schools
PREMARX	Sex before marriage

VALUES FOR CHILDREN (1983)

ROLE	Acts like boy or girl
OBEYS	Obeys parents
CONSIDER	Considerate of others
INTEREST	Interested how and why things happen

ACCEPT CONTRACEPTIVE ABORTION (1982, 1983, 1984)

ABPOOR	If can't afford more children
ABSINGLE	If not married
ABNOMORE	Married—wants no more children
ABANY	If woman wants for any reason

SOCIAL SPENDING LIBERALISM (1982, 1983, 1984)

NATEDUC	Federal spending for education
NATENVIR	Federal spending for environment
NATRACE	Federal spending for condition of blacks

GOVERNMENT INTERVENTION (1983)

EQWLTH	Govt should reduce income differences
HELPNOT	Govt solve problems, not leave to individuals or business
PARTYID	Party identification (1982, 1983, 1984)
POLVIEWS	Liberal/conservative (1982, 1983, 1984)

References

- Abramson, Paul R.
1983 *Political Attitudes in America: Formation and Change*. San Francisco: W. H. Freeman.
- Bellah, Robert N. et al.
1985 *Habits of the Heart: Individualism and Commitment in American Life*. Berkeley: University of California Press.
- Berelson, Bernard R., Paul F. Lazarsfeld, and William N. McPhee
1954 *Voting: A Study of Opinion Formation in a Presidential Campaign*. Chicago: University of Chicago Press.
- Boaz, David
1985 "In '88, who'll win the baby boomers?" *New York Times*, November 7, A35.
- Campbell, Angus et al.
1964 *The American Voter: An Abridgment*. New York: John Wiley.
- Davis, James A.
1975 "Communism, conformity, cohorts, and categories: American tolerance in 1954 and 1972-73." *American Journal of Sociology* 81:491-513.
1980 "Conservative weather in a liberalizing climate: change in selected NORC General Social Survey items, 1972-78." *Social Forces* 58:1129-56.
- Dowd, Maureen
1985 "Retreat of the yuppies: the tide now turns amid 'guilt' and 'denial.'" *New York Times*, June 28, B1, B4.
- Easterlin, Richard A.
1980 *Birth and Fortune: The Impact of Numbers on Personal Welfare*. New York: Basic Books.
- Gitlin, Todd
1980 *The Whole World Is Watching: Mass Media in the Making and Unmaking of the New Left*. Berkeley: University of California Press.
- Himmelsstein, Jerome L., and James A. McRae, Jr.
1984 "Social conservatism, new Republicanism, and the 1980 elections." *Public Opinion Quarterly* 48:592-605.
- Inglehart, Ronald
1977 *The Silent Revolution*. Princeton: Princeton University Press.
- Jennings, M. Kent, and Richard G. Niemi
1981 *Generations and Politics: A Panel Study of Young Adults and Their Parents*. Princeton: Princeton University Press.
- Jones, Landon Y.
1981 *Great Expectations: America and the Baby Boom Generation*. New York: Ballantine Books.
- Kahn, Alice
1983 "Yuppie!" *Express: The East Bay's Free Weekly* 5 (June 10), 1, 6-7.
1985 "Where have all the yuppies gone?" *Express: The East Bay's Free Weekly* 7 (July 26), 1, 8-12.
- Knoke, David
1979 "Stratification and the dimensions of American political orientations." *American Journal of Political Science* 23:772-91.
- Lipset, Seymour Martin
1963 *Political Man: The Social Bases of Politics*. Garden City: Doubleday Anchor.
- Mannheim, Karl
1969 "The problem of generations." Pp. 352-69 in Barry McLaughlin (ed.), *Studies in Social Movements: A Social Psychological Perspective*. New York: Free Press.
- Miller, Warren E., and J. Merrill Shanks
1982 "Policy directions and presidential leadership: alternative interpretations of the 1980 presidential election." *British Journal of Political Science* 12:299-356.

Newsweek

- 1984 "The year of the yuppie." *Newsweek* (December 31):14-31.

Price, Barbara A.

- 1984 "What the baby boom believes." *American Demographics* 6 (May): 30-33.

PS

- 1985 "The elections, the economy, and public opinion: 1984." *PS* 18 (Winter), 28-38.

Public Opinion

- 1984 "Values: generations apart." *Public Opinion* (December/January): 21-37.

Robinson, John P., and John A. Fleishman

- 1984 "Ideological trends in American public opinion." *Annals of the American Academy of Political Science* 472 (March): 50-60.

Russett, Bruce, and Donald R. DeLuca

- 1981 "'Don't tread on me': public opinion and foreign policy in the eighties." *Political Science Quarterly* 96:381-99.

Singer, Eleanor, and Phyllis Endreny

- 1986 "The reporting of social science research in the mass media." In Sandra Ball-Rokeach and Muriel Cantor (eds.), *Media, Audience, and Social Structure*. Beverly Hills: Sage Publications.

Smith, Tom W.

- 1981 "General liberalism and social change in post World War II America: a summary of trends." *Social Indicators Research* 10:1-28.

Stouffer, Samuel

- 1955 *Communism, Conformity, and Civil Liberties*. New York: Doubleday.

Tuchman, Gaye

- 1978 *Making News: A Study in the Construction of Reality*. New York: Free Press.

Turner, Ralph H.

- 1976 "The real self: from institution to impulse." *American Journal of Sociology* 81:989-1016.

Veroff, Joseph, Elizabeth Douvan, and Richard A. Kulka

- 1981 *The Inner American: A Self-Portrait from 1957 to 1976*. New York: Basic Books.

Yankelovich, Daniel

- 1981 *New Rules: Searching for Self-Fulfillment in a World Turned Upside Down*. New York: Random House.

Do Yuppies Matter? Competing Explanations of Their Political Distinctiveness

MICHAEL DELLI CARPINI AND LEE SIGELMAN

IN FUTURE years, 1984 may be viewed as a landmark in the changing political landscape of the United States, notable primarily for the widening gap between men and women on certain political issues and for the exodus of college students, blue-collar workers, and white southerners from the Democratic coalition. In 1984, however, none of these developments received anything approaching the media attention that was lavished on the emergence of young urban professionals, or "yuppies," as a political force. Indeed, 1984 was, as *Newsweek* magazine proclaimed in a cover story, "The Year of the Yuppie," and yuppies were held largely responsible for the year's most surprising political development, the strong primary showing of Gary Hart, himself a yuppie emeritus.

Three separate but related ideas lie beneath the surface of the much-ballyhooed yuppie phenomenon. First, young urban professionals are thought to comprise a distinct "class." That is, a unique confluence of demographic forces—youth, urban residence, and professional

Abstract "Yuppies"—young urban professionals—have often been portrayed as an important new political force. Using data from the 1972–1985 cumulative General Social Survey data file, this article tests various explanations of the political distinctiveness of yuppies. The findings call into question the assumption that youth, urbanity, and professional status combine to form a distinct yuppie political culture above and beyond what would be expected on the basis of an additive combination of these factors. For this and other reasons, the political importance of the yuppie phenomenon appears to have been overstated.

Michael Delli Carpini is Assistant Professor in the Department of Political Science, Rutgers University. Lee Sigelman is Professor in the Department of Political Science, University of Kentucky.

status—is thought to distinguish yuppies socially and culturally from other young people, from other city dwellers, from other professionals, and, of course, from the nonyoung, the nonurban, and the nonprofessionals as well. Second, stemming from this unique demographic profile and its social and cultural offshoots are said to be a distinctive set of political attitudes and opinions. Yuppies are usually (though not always) seen as embodying the “new politics” of the late 1960s and early 1970s (Miller and Levitin, 1976) and the economic conservatism of the 1980s. Third, as a consequence of their distinctive political views, yuppies are considered to be an increasingly significant voting bloc; that is, they are supposed to require special appeals from candidates and parties, and respond to such appeals in much the same way as do blacks, union members, and other groups in American society—by supporting the parties and candidates who appeal directly to their group interests.

This study probes the validity of these ideas. Using data from the 1972–1985 NORC General Social Surveys (GSS), we begin by addressing a pair of key descriptive issues: How significant a part of the American electorate are yuppies? And how distinctive are their political attitudes and opinions? We then turn to a more analytical question: To what can the political distinctiveness of yuppies be attributed? Is it primarily their youth? Their urban residence? Their professional status? The sum total of all three? Or is the whole somehow distinct from the assemblage of parts? Drawing on prior studies of the “new class” and of the relationships between political orientations and age, class, and residence, we outline and test three different interpretations of the roots of the yuppie political phenomenon.¹

Describing the Yuppie Phenomenon

How large a segment of the American public do yuppies comprise? How distinctive are they politically? Before we can answer these questions, we must address a prior issue: What is a yuppie? With tongue in cheek, Piesman and Hartley define a yuppie as a person who: (1) resides in or near a major city; (2) claims to be between the ages of 25 and 45; (3) lives on aspirations of glory, prestige, recognition, fame, social status, power, money, or any of the above; and (4) brunches on the weekend or works out after work (1984: 12). This definition, which is more clever than most but representative of many, employs both de-

¹ Gopoian et al. (1985) have recently used data from the GSS to test Ladd's (1978, 1979) old class/new class interpretation of conflict within the Democratic Party, a topic somewhat related to but quite different from our own interest.

mographic and lifestyle criteria and thereby confuses the alleged consequences of the yuppie phenomenon, understood demographically, with the phenomenon itself. Our own approach is to construe "yuppie" literally: a yuppie is someone who is young, who resides in an urban setting, and who works in a professional occupation. This approach hardly resolves all the important measurement issues (What is young? What is urban? What is a profession?), but it does permit greater discrimination than do many previous usages of the term, which has sometimes been stretched to include all young professionals, urban or not, or even all young people who hold college degrees. Groups defined as broadly as that may merit attention, but calling them yuppies only confuses matters.²

For our purposes, *young* is defined as being between 18 and 39 years of age, *urban* as living in an urban area of at least 100,000 people, and *professional* as working in a job classified as professional or technical by the U.S. Census Bureau.³ According to the pooled 1972-85 GSS data, young people, urbanites, and professionals all represent sizable proportions of the adult population: 46 percent of the GSS respondents are 39 or younger, 26 percent reside in urban areas, and 15 percent work in professional occupations.⁴ However, young urban professionals—people who combine all three of the defining criteria of the yuppie—are quite rare. Yuppies, as defined here, comprise only 2.4 percent of the 1972-85 GSS respondent pool, only 5 percent of those less than 40 years of age, only 9 percent of the urbanites, and only 16 percent of the professionals. In short, yuppies are an extremely small proportion of both the population as a whole and of the relevant sub-populations.⁵

How distinctive are the political attitudes and opinions of this small but highly publicized group? In Tables 1 through 3, we compare yuppies to the rest of the adult public on several key political dimensions. The responses summarized in Table 1 make it clear that there are some

² While we use a fairly strict definition of yuppies, our exploratory analyses using other, broader definitions (such as holding a college degree rather than being a professional) suggest that the conclusions reported below would apply to other definitions of yuppies as well.

³ The cutoff of 39 years old is somewhat arbitrary, and has occasioned much bitterness on the part of one of the co-authors. Replicating the analysis with younger cutoffs (to 35 years old) leads to essentially the same conclusions as those drawn in the text.

⁴ The pooled GSS data set is used because it provides a large enough number of cases (up to 16,572) to allow for an examination of yuppies (404 cases). Replicating the analysis on a survey-by-survey basis suggests that no underlying trends from 1972 to 1985 are hidden by our reliance on the cumulative data set.

⁵ The 2.4 percent figure is consistent with the estimates of Markus and Jennings (1985), who used panel data, and Bruce-Briggs (1979), who used census data. This figure is quite stable over the 15 years of the GSS.

Table 1. Differences Between Yuppies and Nonyuppies on Selected Political Opinions

	<i>Yuppies</i>	<i>Nonyuppies</i>	<i>Sig.</i>
Independent	44%	34%	***
Liberal	49	27	***
Vote Democratic	63	45	***
Taxes too high	70	69	NS
Favor capital punishment	56	69	***
Favor gun control	83	72	***
Courts too harsh	8	4	***
Approve of wiretaps	13	19	**
Legalize marijuana	55	23	***
U.S. stay in U.N.	92	78	***
Communism worst form of government	28	55	***

* = $p < .05$; ** = $p < .01$; *** = $p < .001$; NS = nonsignificant.

substantial differences between the political opinions of yuppies and other Americans. Yuppies are less likely to identify with a political party but, by a large margin, more likely to call themselves liberals and to vote Democratic in presidential elections. On particular political issues, yuppies are generally more liberal as well: they are more opposed to capital punishment and wiretaps, disapprove less of communism, and are more likely to favor gun control, to consider the courts too harsh, to support the legalization of marijuana, and to advocate continued American membership in the United Nations. However, yuppies do not stand out from other Americans with respect to dissatisfaction with the taxes they pay.

Table 2 summarizes some additional evidence concerning the political distinctiveness of yuppies, in the form of the Stouffer (1955) battery of questions concerning tolerance for those who hold unconventional views or practice unconventional lifestyles. In every instance—no matter whether the target group is composed of atheists, socialists, racists, communists, militarists, or homosexuals, and no matter which civil liberty is in question—yuppies express greater tolerance than do other Americans. Not only are these differences statistically significant; many of them are very appreciable as well, with yuppies in some cases being twice as likely as nonyuppies to adopt the tolerant position.

Part of the popular image of yuppies is that they are socially liberal but economically somewhat conservative, and the large percentage of yuppies who feel that taxes are too high (see Table 1) is consistent with that image. In Table 3 we pursue this possibility by examining answers to a series of questions that ask whether the amount the federal govern-

Table 2. Differences in Political Tolerance Between Yuppies and Nonyuppies (percentage that would allow each group to speak, teach college, or have a book in the library)

	<i>Yuppies</i>	<i>Nonyuppies</i>	<i>Sig.</i>
Atheists			
Speak	91%	66%	***
Teach	83	44	***
Book	91	62	***
Socialists			
Speak	94	80	***
Teach	91	60	***
Book	94	73	***
Racists			
Speak	79	60	***
Teach	67	43	***
Book	84	63	***
Communists			
Speak	88	58	***
Teach	79	43	***
Book	88	59	***
Military rule			
Speak	86	55	***
Teach	76	39	***
Book	86	58	***
Homosexual			
Speak	93	67	***
Teach	90	56	***
Book	86	58	***

* = $p < .05$; ** = $p < .01$; *** = $p < .001$.

ment spends in several policy areas is "too much," "too little," or "about right." Playing against their stereotype, yuppies stand out for their tendency to say that too *little* is being spent in most areas: on the space program, the environment, national health, the cities, education, black welfare, and social welfare. On the other side of the coin, yuppies are unusually opposed to defense spending, but this opposition seems more indicative of liberal leanings than of a proclivity toward economic conservatism. The lack of any significant difference between yuppies and other Americans on spending for foreign aid and for combating crime and drug use reflects, in large measure, the noncontroversial nature of these programs: very few Americans, whatever their political outlook, oppose stepped up anticrime and antidrug abuse programs, and very few favor increased foreign aid. The fact that yuppies are indistinguishable from other Americans in their opposition to programs designed to equalize wealth is more interesting, for it serves to emphasize that even though yuppies are apparently more liberal than other Americans, their leftist leanings stop well short of opposition to the basic tenets of individual enterprise.

Table 3. Difference Between Yuppies and Nonyuppies on Attitudes
About Government Spending

<i>Too Little Spent on:</i>	<i>Yuppies</i>	<i>Nonyuppies</i>	<i>Sig.</i>
Space program	21%	12%	***
Environment	79	57	***
National health	74	61	***
Cities	66	50	***
Crime	68	70	NS
Drug use	57	63	NS
Education	72	55	***
Black welfare	47	31	***
Defense	11	27	***
Foreign aid	5	4	NS
Welfare	27	19	**
Equalize wealth	29	30	NS

* = $p < .05$; ** = $p < .01$; *** = $p < .001$; NS = nonsignificant

Dissecting the Yuppie Phenomenon

It is one thing to document political differences between yuppies and other Americans, but it is something else to pinpoint the sources of those differences. Is the political distinctiveness of yuppies primarily attributable to their youth, their urban residence, or their professional status? Is it the cumulative effect of these factors that makes yuppies what they are politically? Or do youth, urban residence, and professional status *in combination* have attitudinal effects above and beyond their cumulative effects?

In dissecting the yuppie phenomenon, we shall pursue three different sets of answers to these questions. To begin with the most complex interpretation, which we term the *yuppie class thesis*, the yuppies' youth, urban residence, and professional status interact in a complex way to produce a culture that nurtures a certain social and political outlook. This interpretation is a variant of the "new class" arguments of Bell (1973, 1979), Ehrenreich and Ehrenreich (1977), Gouldner (1979), Kristol (1972), Ladd (1978), and others, and it also has roots in Reich's (1970) "greening of America" and Inglehart's (1977) "post-materialism" arguments. All these ideas revolve around the development of a new class or subclass that is (depending on which specific argument one consults) young (Inglehart; Podhoretz, 1979), professional (Ehrenreich and Ehrenreich) or upper-middle class (Wildavsky, 1979) or well educated (Ladd), and urbane if not urban (Bruce-Briggs, 1979). Whether the political outlook of this new class is liberal, conservative, or some new ideological hybrid is a point of contention (see Harrington, 1979; Markus and Jennings, 1985), but on balance the arguments point more toward a type of liberalism than conservatism, a

conclusion strongly supported by the data summarized in Tables 1 through 3 above.

There is a second way, which we term the *traditional groups thesis*, to approach the "new class" idea in general and the yuppie phenomenon in particular. Rather than viewing the political distinctiveness of yuppies as an outgrowth of the *interaction* of youth, urban residence, and professional status, which combine in some unique way, it is possible (as well as theoretically more parsimonious) that yuppies are distinctive because they are, in effect, the sum of their parts: they are young, and therefore partake of the political attitudes of the young; they live in cities, and therefore share the political outlooks of urban dwellers; and they are professionals, and therefore think, socially and politically, like other professionals. From this perspective, yuppies do not constitute a distinct class, and no unique fusion of age, residence, and professional status is necessary to explain their distinctive social and political orientations.

Finally, a variant of the traditional groups interpretation, the *special effects thesis*, suggests that age, residence, and status come to the surface politically in rather different ways in different situations. From this perspective, being a yuppie is less like being black or a member of the middle class than it is like being a middle-class black: one is likely to express oneself differently at different times, depending on the circumstances in which one finds oneself; sometimes class considerations predominate, but at other times racial ones do (Bennett, 1980). Thus, for example, yuppies may exhibit greater liberalism and partisan independence as a reflection of their youth (Delli Carpini, 1986), more tolerance as a reflection of their urban residence (Stouffer, 1955), and more opposition to certain government programs as a consequence of their professional status (Brint, 1984). The idea here is not so much that yuppies are, politically, the sum of the parts; rather, a different part may come to the fore politically on each set of issues.

In distinguishing among the joint *interactive* effects of youth, urban residence, and professional status (the yuppie class thesis), their cumulative or *additive* effects (the traditional group thesis), and their differentiated *individual* effects (the special effects thesis), we are not engaging in esoteric hair-splitting. Rather, we are outlining three fundamentally different accounts of the yuppie phenomenon. The yuppie class thesis argues that these separate, sometimes competing forces have resolved themselves into a distinct ideology. This ideology might not fit neatly into a traditional liberal or conservative definition, but it can be identified, and once identified can be appealed to and expressed consistently over time. The traditional groups thesis argues that the important groups to focus on are not yuppies but the larger and more

traditional categories defined by age, occupation, and/or place of residence. From this perspective, there is really nothing politically distinctive about yuppies, who can be looked upon simply as the sum product of various demographic categories. The special effects thesis leads in the same general direction, but not entirely. Here the political distinctiveness of yuppies is viewed on an issue-by-issue basis rather than across the board: particular components of the distinctive yuppie political outlook are seen as stemming from particular demographic elements in the yuppie profile. In sum, whereas the yuppie class thesis sees a gestalt, an overall configuration that is distinct from its individual components, the traditional groups and special effects theses (the latter far more than the former) see a hodgepodge of disparate elements, each with its own peculiar effects.

How can we determine which of these interpretations is the most accurate? The question boils down to whether the political distinctiveness of yuppies is the result of the separate effects of age, residence, and profession, rather than the interaction of these characteristics. If it is, then the secondary question becomes whether youth, urban residence, and professional status have more or less equivalent attitudinal effects, or whether each comes to the fore on certain issues and is relatively ineffectual on others. Viewed in this light, what we have is a relatively straightforward problem in the analysis of variance. We can simply categorize the pooled GSS respondents on the basis of the three variables of interest (39 or younger vs. over 39 years of age, urban vs. nonurban residence, and professional vs. nonprofessional occupation), and then examine the main, two-way, and three-way interaction effects of these characteristics on the political attitudes and opinions we have already examined. To avoid confounding the results, we also control for race and sex.⁶ If the yuppie class thesis is correct, then the three-way interactions of age, residence, and profession should be substantial. If the traditional groups or the special effects thesis is correct, then the main effects of youth, urban residence, and professional status should predominate. If the relative influence of these factors varies a good deal from one item to the next, then the special effects thesis would seem applicable, but if these influences are reasonably consistent we would have evidence on behalf of the traditional groups thesis.

⁶ The results presented below are from a classical analysis of variance model, in which effects are adjusted first for the covariates (controls), then for the main effects, and finally for the interaction effects. This approach was selected because it most closely parallels the theoretical model underlying the research. In point of fact, however, the use of a regression approach, in which all three levels of effects are controlled for simultaneously, does not change the substantive conclusions we draw, though it does decrease the number of significant main effects slightly.

Table 4. Main, Two-Way, and Three-Way Interaction Effects of Being Young, Urban, and Professional on Selected Opinions (Controlling for Race and Sex)

	Main Effects			2-Way Interactions			3-Way Interactions
	Young	Urban	Prof.	Y-U	Y-P	U-P	Y-U-P
Party ID	NS	.05**	-.06**	NS	.03**	.02	NS
Ideology	.06**	.04**	.01	NS	.02	NS	NS
Vote choice	.03*	.09**	-.04*	.01	.03**	.08	NS
Taxes	NS	NS	NS	NS	NS	NS	NS
Capital pun.	.02	.03**	.06**	.03**	NS	NS	NS
Gun control	.02*	.08**	.05**	NS	.03**	NS	NS
Courts	.05**	.01*	.01*	.02*	NS	.02	.01
Wiretaps	.05**	.02	-.03*	NS	NS	.04*	NS
Marijuana	.19**	.08**	.08**	.02**	NS	.06**	NS
UN	.09**	NS	.07**	NS	NS	NS	NS
Communism	.06**	.07**	.04**	.01	NS	NS	NS
Average	.05 (.08)	.04 (.05)	.02 (.04)	.01	.01	.02	.00

NOTE: All entries are *net* deviations from the mean on scales with a range of one. A positive entry represents a more liberal score. Only deviations with $p < .05$ are entered. * = $p < .01$; ** = $p < .001$; NS = nonsignificant. Numbers in parentheses are average betas adjusted for independent variables and covariates.

Table 4 presents the analysis of variance results for the set of issues originally analyzed in Table 1.⁷ The cell entries are the differences in the mean scores between the group in question and the rest of the pooled sample, with race and sex held constant. To aid in interpretation of the results, all variables have been coded to have a possible range of one, and a positive entry indicates a more liberal score. For example, the .05 entry for urbanites on party identification means that, controlling for age, occupational status, sex, and race, the mean score of urbanites is 5 percent more Democratic than that of those who do

⁷ Since Multiple Classification Analysis does not calculate deviations from the mean for interaction effects, these were estimated separately. This was done by replicating the ANOVA models, but treating significant interaction terms from the first model as main effects in the second; for example, being a young professional became a main effects category in the second-round ANOVA. The deviation from the mean of this combined effect was then compared to the deviation from the mean that would result from the simple additive effects of the characteristics in question, all other controls being the same. The difference between the expected and the actual deviations is the contribution of the interaction effect to the overall score. To return to the example, if the first ANOVA found that there was a significant interaction effect between age and occupation, a second ANOVA was run, identical to the first except that age and occupation were combined to form a single main effects category (young and professional or not young and professional). All other factors and covariates remained the same. The deviation from the mean for young professionals was then compared to the summed deviation of being young and of being professional in the first model. The difference between these totals is the interactive effect of the two characteristics, controlling for place of residence, race, and sex.

not live in urban areas. Because of the difficulty in interpreting statistically insignificant deviations from the mean (especially for interaction effects), only entries that are significant at the .05 level are included in this and the ensuing tables. We do, however, on occasion allude to these nonsignificant deviations when they appear suggestive.

As can be seen by examining the three-way interactions, being a yuppie contributes practically nothing to the political stands of this segment of the population. Only attitudes toward harsher court sentencing are significantly affected by being young *and* urban *and* professional, leading to a 1 percent more liberal stance than would otherwise be expected. On this first set of items, then, the yuppie class thesis does not fare at all well in accounting for the political distinctiveness of yuppies.

There is somewhat more evidence that the two-way interactions contribute to a distinct and liberal political profile. Being young *and* urban leads to slightly more pronounced Democratic vote choice and to more liberal views concerning capital punishment, court sentencing, the legalization of marijuana, and communism as a form of government. Being young *and* a professional leads to slightly more Democratic partisanship and vote choice, a more liberal self-image, and greater support for gun control. And being urban *and* professional leads to more Democratic identification and vote choice, and to more liberal stands on sentencing, wiretapping, and the legalization of marijuana. Again, however, most of the two-way interactions (58 percent) are not significant, and those that are significant tend to be of modest magnitude.

It is in the main effects of age, residence, and occupation that by far the greatest political impacts are found. Being young is associated with more liberal stands on all opinions except party identification and concern over taxes, neither of which is significantly related to age. Urbanites are more liberal on every issue except taxes and American membership in the United Nations, both of which are unrelated to place of residence. Professional status is significantly related to positions on all issues except taxes, but these relationships vary in direction. When we control for the other variables in the model, professionals are slightly more likely to call themselves liberals and to take the liberal view of capital punishment, gun control, court sentencing, the legalization of marijuana, the United Nations, and communism. They are, however, more oriented toward the Republican Party (in both identification and vote) and are more likely to take a permissive attitude toward wiretapping. This now-liberal, now-conservative mixture in the political outlook of professionals bears out, to some extent at least, arguments made by both sides in the debate discussed earlier. What is interesting,

however, is that for each issue on which professionals as a group are more conservative than the norm, there is a significant *liberal* interaction for young professionals and/or urban professionals. On these issues, then, the main, conservatizing effect of professional status is offset by a more complex effect in which professional status is involved.

The bottom row of Table 4 shows the mean deviation for each of the main and interaction effects across all eleven items. While none of these effects is truly dramatic, the effects that do emerge are clearly the result of main effects. Almost 75 percent of the liberal tendencies of young urban professionals result from the separate main effects of these three characteristics. The three-way interactions are essentially nonexistent. The two-way interactions are somewhat more important than the three-way, and when they do come into play it is always to increase liberal tendencies. Although one must be extremely cautious in interpreting nonsignificant interactions, this pattern is borne out there as well (not shown).

Table 5 summarizes the analysis of variance results for the political tolerance items. The same pattern of findings that we noted in Table 4 recurs in Table 5: almost no three-way effects, some two-way effects, and dominant main effects. There are a few differences, however. In the case of political tolerance, all but one of the significant two-way interactions are between being young and professional. In addition, in a complete reversal of the findings in Table 4, all of these interactions have a conservatizing effect: young professionals are less tolerant than their occupation and their age would predict. The main effects of age and occupational status are the most important sources of tolerance for yuppies, with place of residence being considerably less important. Professionalism does not demonstrate the same inconsistent effects on political tolerance that it does for general issue stands. Most of all, the main effects are dominant, and once again they point in the direction of greater liberalism. More than 85 percent of the impact of being a yuppie is the result of being young and of being professional, and over 95 percent of the impact is due to main effects. Only one (out of a possible 18) significant effects can be attributed to the three-way interaction among youth, urban residence, and professional status, and like the two-way interactions between age and occupation, this effect is to decrease the level of tolerance. The nonsignificant three-way interactions also tend to decrease tolerance (by an average of .02), but again one can have little confidence in these findings. The nonsignificant two-way interactions are small and erratic.

Finally, Table 6 shows the analysis of variance results for opinions concerning government spending. The overall pattern is similar in most

Table 5. Main, Two-Way, and Three-Way Interaction Effects of Being Young, Urban, and Professional on Political Tolerance (Controlling for Race and Sex)

	Main Effects			2-Way Interactions			3-Way Interactions
	Young	Urban	Prof.	Y-U	Y-P	U-P	Y-U-P
Atheists							
Speak	.23**	.05**	.19**	NS	-.03**	NS	NS
Teach	.30**	.07**	.21**	NS	NS	NS	NS
Book	.22**	.07**	.21**	NS	-.05**	NS	NS
Socialists							
Speak	.15**	.04*	.12**	NS	-.04	NS	NS
Teach	.22**	.06**	.14**	NS	NS	NS	NS
Book	.16**	.04	.15**	NS	NS	NS	NS
Racists							
Speak	.13**	.04*	.15**	NS	NS	NS	NS
Teach	.15**	.04*	.14**	NS	NS	.05	NS
Book	.11**	.04*	.18**	NS	-.03*	NS	NS
Communists							
Speak	.19**	.08**	.21**	NS	-.02*	NS	NS
Teach	.22**	.08**	.22**	NS	NS	NS	NS
Book	.21**	.08**	.22**	NS	-.05**	NS	NS
Military Rule							
Speak	.22**	.04*	.21**	NS	NS	NS	NS
Teach	.26**	.04**	.20**	NS	NS	NS	-.03
Book	.22**	.05**	.22**	NS	-.04*	NS	NS
Homosexuals							
Speak	.17**	.08**	.20**	NS	-.03*	NS	NS
Teach	.24**	.09**	.22**	NS	NS	NS	NS
Book	.21**	.08**	.20**	NS	-.03**	NS	NS
Average	.20 (.21)	.06 (.06)	.19 (.14)	.00	-.02	.00	.00

NOTE: All entries are *net* deviations from the mean on scales with a range of one. Positive entries indicate greater tolerance. Only deviations with $p < .05$ are entered. * = $p < .01$; ** = $p < .001$; NS = nonsignificant. Numbers in parentheses are average betas adjusted for independent variables and covariates.

respects to those found in Tables 4 and 5, except that the interaction effects in Table 6 are even more conspicuously absent. Once again, the three-way interactions are nonsignificant, both statistically and substantively. Thirty of the 36 two-way interactions are also nonsignificant. Of the six significant interactions, four are in the direction of slightly more conservative stands among young urbanites, young professionals, or urban professionals. The nonsignificant two-way interactions again show no discernible pattern.

Again it is the main effects that are most important elements in shaping the political distinctiveness of yuppies. Young people favor government spending more than older people do on every issue except crime, drug use, and equalizing wealth, where there are no significant age-based differences, and defense, where the young favor less spending. Since favoring less spending on defense is the more liberal opin-

Table 6. Main, Two-Way, and Three-Way Interaction Effects of Being Young, Urban, and Professional on Opinions Concerning Government Spending (Controlling for Race and Sex)

Too Little Spent on:	Main Effects			2-Way Interactions			3-Way Interactions
	Young	Urban	Prof.	Y-U	Y-P	U-P	Y-U-P
Space	.07**	.03*	.11**	NS	NS	-.03	NS
Environment	.15**	.05**	.05**	NS	NS	NS	NS
Health	.04**	.01	NS	NS	NS	NS	NS
City	.08**	.08**	.04**	-.02*	NS	NS	NS
Crime	NS	.01*	NS	.01**	NS	NS	NS
Drug use	NS	-.01	-.02	NS	NS	NS	NS
Education	.11**	.03**	.03**	NS	NS	NS	NS
Blacks	.06**	.03**	.06**	NS	NS	NS	NS
Defense	-.08**	-.04**	-.08**	-.02*	NS	NS	NS
Foreign aid	.05**	.01**	.02*	NS	-.03*	NS	NS
Welfare	.04**	.06**	-.02*	NS	NS	NS	NS
Wealth	NS	NS	-.08**	NS	.03*	NS	NS
Average ^a	.06 (.08)	.03 (.04)	.02 (.04)	.00	.00	.00	.00

NOTE: All entries are *net* deviations from the mean on scales with a range of one. Positive entry indicates a desire for more government spending. Only deviations with $p < .05$ are entered. * = $p < .01$; ** = $p < .001$; NS = nonsignificant.

^a Desire for less spending on defense is treated as a liberal response. Numbers in parentheses are average betas adjusted for independent variables and covariates.

ion, and since spending on drug use is not easily characterized in liberal or conservative terms, it seems safe to conclude that overall the young are generally more liberal in their views concerning government spending.

Urban residents demonstrate a pattern similar to, though more modest than, that of young people. The only real differences are that urban dwellers favor slightly more spending on social welfare and crime, and support slightly smaller increases in other policy areas (space, environment, education, foreign aid, and so on). With the exception of spending on drug abuse, however, these differences are of degree and not ideological direction: both urban dwellers and young people demonstrate the liberal pattern of greater spending in most policy areas except defense. Again, professionals show somewhat inconsistent patterns, though again the more liberal approach of greater spending in areas other than defense dominates. Professionals are, however, less likely to support spending on welfare or on equalizing wealth, suggesting that in the end, they know where their interests lie.

The mean deviations at the bottom of Table 6 summarize these trends nicely, showing that the liberal tendencies of yuppies are due largely to the main effects of age and residence. Over 80 percent of the distinctiveness of yuppies is accounted for by these two characteristics, and all of yuppies' liberal stands on government spending can be traced to the separate main effects of age, residence, and professional

status. Again, the interaction of all three characteristics, the surest indication of a yuppie class effect, is unimportant.

All of the analyses presented thus far were based upon the entire 1972-1985 data file. While the social forces making yuppies a potentially distinctive political phenomenon have existed since at least the early 1970s, yuppies did not draw national attention until the 1980s. It is possible, therefore, that the yuppie thesis would fare better if only data from 1980 onwards were employed. Thus the statistical analyses were replicated once using only data from 1972 to 1979, and then using data from 1980 to 1985. The results strongly suggest that the interpretations presented above hold equally well for the 1970s and the 1980s. Of the 41 three-way interactions examined, only 2 (or 5 percent) were significant in the 1980s but not in the 1970s, a result easily attributable to chance. Five of the 123 two-way interactions (4 percent) were significant in the 1980s but not in the 1970s. Overall, 93 percent of the main, two-way, and three-way effects for the 1980-1985 data demonstrate the same levels of significance presented in Tables 4 through 6.

Conclusion

To summarize, despite the flood of media attention that has engulfed them, yuppies constitute a very small percentage of the population in general and of the baby-boom generation in particular. On strictly demographic grounds, then, there is reason to agree with the assessment that "the yuppies . . . don't deserve the attention they're getting" (American Demographics, 1985: 29). On the other hand, even though they are not especially numerous, yuppies do stand out from the great mass of Americans in their political attitudes and opinions: they are more liberal on a host of issues but less likely to identify with a political party, more likely to favor greater government spending on social and welfare programs, less likely to support defense spending, and considerably more politically tolerant than the general population. In light of their status relative to the population as a whole and to the new generation of Americans (as well as their perceived importance in the minds of journalists, politicians, and academics), they may constitute a more potent political force than their numbers alone would suggest.

The analysis of variance results indicates that yuppies' liberal tendencies are not due to some unique political profile that results from the combination of being young, urban, and professional, but instead are largely due to the separate, additive effects of these three characteristics. That is, yuppies are more liberal than the rest of the population because they are young, and young people are generally more liberal; because they are urban, and urbanites are generally more lib-

eral; and because they are professional, and professionals are, on balance and in recent times, more liberal. If one is interested in identifying ideologically distinct portions of the population, one would be on much stronger ground examining the three larger categories defined by youth, urban residence, and professional status than their essentially coincidental intersection in yuppies, because it is largely the three main characteristics themselves that account for any political distinctiveness that exists.

The only evidence of any unique effects of the yuppies' defining characteristics is in the two-way interactions: on approximately a quarter of the issues we examined (30 of the possible 123), these interactions do affect the distinctiveness of yuppies beyond what would be expected from the main effects alone. These interactions, which are most common for young professionals, are about as likely to lead to a more conservative as to a more liberal yuppie political profile. Which two-way interactions are most common, as well as the directional pull of the effects, vary dramatically with the type of opinion, however. Effects on general issue stands (Table 4) are equally likely among the three types of interactions, but are exclusively liberal in their impact. For political tolerance (Table 5), 9 of the 10 two-way interactions are between age and professional status, and all 9 act to reduce tolerance. Two-way interactions are least common for opinions on government spending (Table 6), and are as likely to lead to increased conservatism as liberalism. However, to return to the truly important part of the story, any interaction effects—two-way or three-way—are almost invariably less important than the corresponding main effects. In fact, in only 2 of the 49 analyses of variance is the three-way interaction among youth, urban residence, and professional status statistically significant, let alone substantively important.

Thus, we have uncovered virtually no evidence that would support the yuppie class thesis, the notion that a synergism among the component elements of yuppiedom makes yuppies somehow *sui generis* politically. The generally liberal stands of yuppies are explainable without reference to any yuppie class or new class notion, and a very traditional group politics thesis performs quite nicely indeed. In certain instances we have also turned up evidence that points toward the applicability of the special effects thesis, for the conservative effects of professional status do occasionally come into conflict with the more liberal tendencies associated with youth and urban residence. The tendency of the two-way interaction effects to vary in their ideological impact depending upon the nature of the issue involved might also be interpreted as support for this thesis. But again, this is only a second-

ary pattern, greatly overshadowed by primary, main effects we have observed.

Of course, it is still possible that the yuppie thesis is of political import, but in ways that have not been tapped in this study. The concept of "a yuppie" may be less a matter of demographic characteristics than—to return to the third and fourth parts of Piesman and Hartley's definition—of a state of mind or a lifestyle. As we mentioned at the outset of this article, however, such an amorphous definition tends to confuse the consequences of the concept with the concept itself. For "yuppie" to be a useful construct in understanding contemporary politics, it must be defined with precision. And the research introduced here suggests that as the definition of yuppies becomes less amorphous, the political significance of yuppie status becomes more ephemeral.

References

American Demographics

- 1985 "The big chill (revisited), or whatever happened to the baby boom?" *American Demographics* 7 (September): 22–29.

Bell, Daniel

- 1973 *The Coming of Post-Industrial Society*. New York: Basic Books.
1979 "The new class: a muddled concept." Pp. 169–90 in B. Bruce-Briggs (ed.), *The New Class?* New Brunswick, NJ: Transaction Books.

Bennett, W. Lance

- 1980 *Public Opinion in American Politics*. New York: Harcourt Brace Jovanovich.

Brint, Steven

- 1984 "'New-class' and cumulative trend explanations of the liberal political attitudes of professionals." *American Journal of Sociology* 90 (July): 30–71.

Bruce-Briggs, B. (ed.)

- 1979 *The New Class?* New Brunswick, NJ: Transaction Books.

Delli Carpini, Michael X.

- 1986 *Stability and Change in American Politics: The Coming of Age of the Generation of the 1960s*. New York: New York University Press.

Ehrenreich, Barbara, and John Ehrenreich

- 1977 *The professional-managerial class*. *Radical America* 7 (March-April): 7–31.

Gopoian, David, Derek Hackett, Daniel Parelman, and Leo Perrotta

- 1985 "The Democratic Party coalition in the eighties: a reassessment of Ladd's old class/new class explanation of party conflict." Paper, annual meeting of the Southern Political Science Association, Nashville.

Gouldner, Alvin W.

- 1979 *The Future of Intellectuals and the Rise of the New Class*. New York: Seabury.

Harrington, Michael

- 1979 "The new class and the left." Pp. 123–38 in B. Bruce-Briggs (ed.), *The New Class?* New Brunswick, NJ: Transaction Books.

Inglehart, Ronald

- 1977 *The Silent Revolution: Changing Values and Political Styles among Western Publics*. Princeton: Princeton University Press.

Kristol, Irving

- 1972 "About equality." *Commentary* 54 (November): 41–47.

Ladd, Everett C., Jr.

1978 "The new lines are drawn: class and ideology in America. Part I." *Public Opinion* 3: 48-53.

1979 "Pursuing the new class: social theory and survey data." Pp. 101-22 in B. Bruce-Briggs (ed.), *The New Class?* New Brunswick, NJ: Transaction Books.

Markus, Gregory, and M. Kent Jennings

1985 "Of yuppies, enddies, and the formation of political generations." Paper, annual meeting of the American Political Science Association, New Orleans.

Miller, Warren, and Teresa Levitin

1976 *Leadership and Change*. Cambridge, MA: Winthrop.

National Opinion Research Center

1972- General Social Surveys. Chicago: NORC, University of Chicago.

1985

Newsweek

1984 "The year of the yuppie." *Newsweek* (December): 14-20.

Piesman, Marissa, and Marilee Hartley

1984 *The Yuppie Handbook: The State-of-the-Art Manual for Young Urban Professionals*. New York: Long Shadow Books.

Podhoretz, Norman

1979 "The adversary culture and the new class." Pp. 19-32 in B. Bruce-Briggs (ed.), *The New Class?* New Brunswick, NJ: Transaction Books.

Price, Barbara A.

1984 "What the baby boom believes." *American Demographics* 6 (May): 30-33.

Reich, Charles

1970 *The Greening of America*. New York: Random House.

Stouffer, Samuel

1955 *Communism, Conformity, and Civil Liberties*. New York: Doubleday.

Wildavsky, Aaron

1979 "Using public funds to serve private interests: the politics of the new class." Pp. 147-54 in B. Bruce-Briggs (ed.), *The New Class?* New Brunswick, NJ: Transaction Books.

The Perceived Threat of Nuclear War, Salience, and Open Questions

HOWARD SCHUMAN, JACOB LUDWIG, AND
JON A. KROSNICK

FREEMAN DYSON begins his book *Weapons and Hope* (1984) with the statement: "I want to discuss the gravest problem facing mankind, the problem of nuclear weapons" Dyson's belief that the threat of nuclear war constitutes the most important problem facing Americans today has been shared by leading scientists from Albert Einstein to the 20 eminent signatories of a recent article on the consequences of a "nuclear winter" (Ehrlich et al. 1983), and has been echoed as well by a number of political and intellectual leaders. Their reasoning is straightforward: the United States and the Soviet Union have for many

Abstract The most serious problem facing the United States, according to many scientific and political leaders, is the threat of nuclear war. Yet the standard survey question on the most important problem facing the country has often shown little public concurrence with this assumption. Our article uses experimentation in national samples to test whether this difference can be traced to limitations in either the form or the wording of the standard question. The results indicate that there are some important systematic differences between open and closed versions of the question, and also differences that result from reference to the nation as distinct from the world, but neither type of difference accounts for the infrequent mention of nuclear war on the standard question. Instead, other evidence indicates that most Americans believe that nuclear war is not going to happen at all, or that if it does happen it will be too far in the distant future to be of pressing concern to them personally.

Howard Schuman is Director of the Survey Research Center and Professor of Sociology at the University of Michigan. Jacob Ludwig is Statistician and Methodologist at the Gallup Organization. Jon A. Krosnick is Assistant Professor of Psychology at the Ohio State University. An earlier version of this article was presented at the Annual Meeting of the American Association for Public Opinion Research, May 1984. The authors wish to thank Edward Blair for having raised a stimulating challenge to their analysis, and Lincoln Moses for providing statistical consultation that helped them deal with the challenge. The research on which the article is based was supported by a grant from the National Science Foundation (SES-8411371). The article was completed while the senior author was a Fellow at the Center for Advanced Study in the Behavioral Sciences, with support from a National Science Foundation grant (#BNS-8011494).

years and with ever-increasing certainty possessed sufficient nuclear weapons to destroy much of human civilization and perhaps extinguish the human race itself. In the face of such potential disaster, national issues, interests, and ideologies must be subordinated to the simple need for survival.

However, if we are to judge by surveys that allow spontaneous ranking of this issue relative to other issues, a strong concern about nuclear war has seldom been uppermost in the minds of the great majority of Americans. Surveys conducted during 1980 and 1981 by the University of Michigan Survey Research Center (Miller, 1981) and by the Gallup organization (Gallup, 1982) found fewer than 10 percent of the American adult population mentioning the threat of war of any kind when asked one or another variant of the basic question: "What do you think is the *most* important problem facing this country today?" During the 1950s and 1960s international issues did figure more prominently in answers to this standard index question, but for the most part these seemed to revolve around particular crises such as Vietnam, rather than around the more general issue of nuclear war (Smith, 1980). The two themes—nuclear war and more specific military engagements—are not easily separated, as we will later see, but the virtual disappearance of international categories from the Gallup results after the United States withdrew from Vietnam in the early 1970s shows how little the nuclear war threat itself was the enduring and overriding issue elicited by the most important problem question.

In this article we investigate two possible explanations for the relatively low spontaneous mention of the threat of nuclear war by Americans. One explanation implies methodological artifact: the standard open-ended most important problem question may itself be too limited, obtaining superficial answers that reflect what is momentarily salient to respondents about national events, rather than eliciting their more considered judgments. A finding by Schuman and Presser (1981) that a sudden cold spell in 1977 drastically affected responses to the most important problem question can be interpreted in just this way. The second explanation is quite opposite, however, for it accepts the survey data at face value and attempts to determine why the threat of nuclear war may not be regarded as especially important by most Americans, no matter how the question is asked.

We tested the two explanations by means of experimental comparisons of open and closed question forms at five time points over a 21-month period in 1982 and 1983, by follow-up probe questioning at two of the time points, by altering the wording and therefore the frame of reference of the questions, and by a review of some key indicators of the news environment for the same 18-month period. The article also

explores more generally the possible distinction between *salience* and *importance* in survey questioning. In doing so, we add to ideas and evidence developed earlier by Schuman and Presser (1981) concerning the differences between open and closed questions in survey research.

Salience and Importance in the Study of Attitudes

The standard "most important problem" (hereafter, MIP) question that is used by many survey organizations to track changes in public perceptions of national issues requires a spontaneous reply on the part of the person answering, rather than a choice among offered alternatives. It is useful to think of the respondent's mental process in answering the question as a two-step sequence: a set of one or more issues must be brought to mind, then a choice made among them if there is more than one.

In the context of the survey interview, the first step in the process might seem to depend heavily on what is salient in the respondent's immediate environment, for example, what he or she heard most recently on television news, saw on a newspaper's front page, or experienced personally on the job, shopping in a store, or in some other recent life activity. It may be that inflation, unemployment, and other non-nuclear issues are frequently spotlighted in just these ways, but that the threat of nuclear war comes to mind less easily because much of the time it is not in the news a great deal—at least not in a concrete, easily visualized way—nor is it connected directly to daily life.¹

This line of explanation is consistent with the dominant use of the term *salience* in cognitive psychology, where it is ordinarily employed to refer to conspicuous but not necessarily important aspects of the external world (for example, an odd hat) that catch a perceiver's immediate attention. Even where the internal world of memory is the reference, the stress is still on the fleeting, so that the phrase "seemingly trivial but highly salient information" (Taylor and Fiske, 1978:252) captures well the emphasis in much cognitive writing.

To be sure, salience has come to suggest matters of greater substance within survey research. Cannell and Kahn (1968) describe reporting accuracy as having "to do with the importance or salience of [an] event for the person reporting," thus using the two terms interchangeably. And Scott (1968), dealing with the kinds of attitude questions frequently used in surveys, suggests that salience is "perhaps

¹ The effect of the mass media in influencing the definition of important issues for the public has been documented in a number of studies of agenda setting. See, for example, Iyengar et al. (1982), MacKuen (1981), McCombs (1981).

indistinguishable from . . . the importance of the focal object to the person." Yet it may be that open survey questions, even questions that ask for the "most important problem," obtain mainly what is salient in the sense of conspicuousness, not what is deeply important to the individual.

A closed question, on the other hand, by first offering a set of choices and then asking for a decision as to the most important, avoids the problem of differential salience among the issues presented. The respondent's sole task is to choose among the offered alternatives on the basis of considered judgment as to their relative importance.² If the reason that the threat of nuclear war is seldom given to the open MIP question is its lack of salience, then when added as a choice to a closed set of alternatives that are already given frequently to the open question, nuclear war should show a significantly larger (ideally, much larger) open-to-closed increment than the others.

We will first test this hypothesis directly, then consider the alternative line of explanation that takes seriously the apparent lack of public concern about nuclear war implied by responses to the open form of the MIP question.

Method and Preliminary Results

Open and closed forms of the MIP question were administered in split-ballot experiments to random halves of national samples in each of five monthly Survey Research Center (Survey of Consumer Attitudes) telephone surveys between April 1982 and December 1983. The exact wording of the questions and the coding categories used for the open form (and where relevant for the closed form) are presented in Table 1. The closed alternatives were developed in early 1982 by drawing on the largest categories reported for recently employed versions of the open question by the Gallup organization, with the restriction that no more than five closed alternatives could be used because prior experience suggested this to be the maximum number feasible in telephone surveys. In fact, after starting *a priori* with "the threat of nuclear war," only three other problems ("the high cost of living," "un-

² It might seem as though the order in which closed alternatives are read could influence responses, but Schuman and Presser (1981: 61-63) provide experimental evidence against this possibility with a very similar question. Furthermore, the same authors (1981: 99, 292-93) offer evidence against the easy assumption that small differences in phrasing closed alternatives necessarily affect distributions. Although the possibility of such effects remains in any particular instance and makes further empirical tests always desirable, we proceed here on the assumption that neither response order nor minor aspects of wording has a major impact on the univariate distribution to the closed question.

Table 1. Responses to Open and Closed Forms of the Most Important Problem Question*

Response	April 82		June 82		October 82		July 83		December 83	
	Open	Closed	Open	Closed	Open	Closed	Open	Closed	Open	Closed
High cost of living, inflation	16.1%	22.3%	16.1%	22.5%	5.8%	21.7%	5.3%	20.0%	2.1%	15.3%
Unemployment	28.0	42.6	28.2	39.3	42.9	45.5	41.5	45.3	22.3	28.0
Nuclear war, war	5.9	14.7	8.0	16.2	3.7	12.2	6.3	13.5	23.8	30.3
Budget cuts	1.6	7.6	2.9	10.5	1.0	3.2	—	6.5	0.7	10.3
Interest rates	1.1	0.5	3.4		1.6				0.4	0.4
Government deficit	1.6		0.6	1.0	1.6	3.7	1.0	2.4	2.1	4.2
General economics n.e.c.	9.1	0.5	9.2	1.6	11.0	1.1	6.8	0.6	7.1	1.5
Soviet aggression	1.1				0.5				0.7	
National defense	1.1	0.5	1.7	0.5	1.0	0.5	1.4		2.1	0.8
U.S. involvement in specific countries (e.g., Lebanon)	1.1				0.5		2.4		6.0	
Foreign affairs, n.e.c.	3.2		5.7	1.0	4.2	0.5	7.2	1.8	5.7	0.8
Crime	4.3	2.0	4.0		3.1	1.1	1.0	0.6	2.8	0.4
Food, energy shortages	1.1		1.1		1.0		1.4			
Moral, religious breakdown	5.4	2.5	5.7	3.1	6.8	2.1	7.7	2.9	7.4	0.8
Distrust of government	2.7	1.5	4.0	1.6	3.7	0.5	1.9	1.2	3.9	0.4
Other government defects	3.8	1.5	4.0	0.5	1.6	3.7	2.4	1.2	2.1	1.9
Other/more than one coded response	10.2	2.5	4.6	1.0	9.4	3.2	10.6	4.1	7.8	4.6
Don't know	2.7	1.0	0.6	1.0	0.5	1.1	2.9		2.8	0.4
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
N	186	197	174	189	191	189	207	170	282	261

* Open Question: "What do you think is the *most* important problem facing this country today?"

Closed Question: "Which of the following do you think is the *most* important problem facing this country today—the high cost of living, unemployment, the threat of nuclear war, or government budget cuts—or if you prefer, you may name a different problem as most important."

employment," and "budget cuts") were mentioned often enough at that point (February 1982) to seem to require inclusion as closed alternatives, with the first two the clearly dominant open responses at the time. ("Budget cuts" was far behind cost of living and unemployment, and just slightly ahead of responses under the general heading of "war.") We shall use the term *common categories* to refer to these four alternatives, since they were presented as choices on the closed form and also served as code categories for the open form. Other noncommon categories were developed as needed to accommodate other types of responses that did not fit the four common categories.

The closed version of the MIP question differed from the typical closed survey question by providing an explicit legitimization of "other" responses: it included after the four alternatives the statement "or, if you prefer, you may name a different problem as most important." This was done in order to avoid creating question form differences by fiat. Thus the total set of open and closed categories parallel each other to the extent that the two forms elicited the same types of responses. The legitimization of "other" responses to the closed question led to an average of 15 percent of the answers falling outside the four common categories with little variation (11–17 percent) across the five surveys. The 11–17 percent contrasts with figures of less than 2 percent in earlier experiments where such legitimization was not provided (Schuman and Presser, 1981).

Despite this amendment to the closed question, the open form produced many more noncommon category responses than did the closed, though most of these led to additional categories that were either very small or else were vaguely miscellaneous in nature (e.g., "general economic conditions, not elsewhere classified"). Furthermore, the overall proportion of open responses that fell into the four common categories considered as a totality is remarkably constant over the 21-month period: for the five surveys the percentage in the common categories on the open form varies within the narrow range of 49 to 55 percent, with no discernible trend up or down over time. In sum, even though proportions among the four common categories in Table 1 shift markedly over the 21 months, the open/closed comparisons deal, so far as we can tell, with much the same subpopulation (i.e., that part of the national population located within the common categories on each form) at all five time points.³

Main Results

OPEN/CLOSED DIFFERENCES IN MENTIONS OF NUCLEAR WAR

The hypothesis that the nuclear war threat is seldom mentioned to the open question because of its low salience cannot be adequately tested by simply comparing the open and closed percentages for this category in Table 1. Each of the four common categories shows an increase in percentage between open and closed forms, which will usually be the case as one moves from an open question to a closed

³ The one noncommon category of some frequency was "breakdown of morals and religion," but it also changes little in its proportion over the period we tracked, and we therefore assume that movement between it and the common categories was not an important influence on the latter during this time period.

question constraining respondents to a small number of specified categories. A more meaningful test of the hypothesis is to ask whether the nuclear war choice shows a greater open to closed form increment than do the other three categories.

To determine whether low salience does in fact reduce nuclear war responses on the open form, we use the chi-square test to compare the distributions for the two forms, with the null hypothesis being that salience is *not* a factor on the open form and therefore that the two distributions will not differ. Furthermore, in order to focus specifically on the nuclear threat alternative as against all others, the other three common categories are collapsed, creating a 2 by 2 chi-square test for each of the five years. When such a test is carried out, in three of the five surveys there is no significant difference between the two forms. Moreover, in one of the two months in which the forms do differ significantly ($p < .05$ in October 1982, and $p < .02$ in December 1983), the ratio of nuclear war responses to the other three collapsed categories is actually higher on the open form than it is on the closed form (December 1983). These results argue against the hypothesis that an artifactual limitation in the open question accounts for infrequent mention of the nuclear war threat on that form.

In addition, looked at in more absolute terms, in none of the first four surveys does the proportion of respondents choosing nuclear war as the most important problem on the closed form ever reach one out of five, whereas unemployment claims almost half the respondents in two of those months. This hardly suggests that respondents, when reminded of the nuclear war threat, gravitate toward it in great numbers. To be sure, in the fifth month the percentage choosing nuclear war on the closed form rises to 30 percent, but at that point the parallel open form common category shows almost as high a proportion. In sum, the low salience explanation for infrequent mention of nuclear war on the standard MIP question is not confirmed by the data in Table 1.

THE UNIMPORTANCE OF NUCLEAR WAR FOR THE AMERICAN PUBLIC

In four of the five closed question data sets shown in Table 1, the threat of nuclear war went unchosen by more than four-fifths of the population sampled. If this is not due to the form of the survey question, then it becomes plausible to conclude that much of the public does not share the belief of Dyson and others concerning the paramount importance of the nuclear threat. In an attempt to understand this relative lack of concern about nuclear war, we asked those respondents in our last two surveys who did *not* choose nuclear war on the

Table 2. Reasons for Not Choosing "Threat of Nuclear War" on Closed Questions^a

<i>Reasons</i>	<i>Percent</i>
1. Denial that nuclear war is possible E.g., "I don't think there will ever be a nuclear war. It is no threat. One country will not destroy the other or take a chance."	20.9
2. Nuclear war not an immediate problem E.g., "Because the threat of nuclear war is sort of remote, but unemployment is a problem right now in this area."	25.0
3. Nuclear war is out of my control E.g., "Well, you've got to live while you're alive. It's something that we can't do anything about."	8.1
4. Combination of 1 and 2	7.8
5. Combination of 1 and 3	1.3
6. Combination of 2 and 3	5.3
7. Repeat of original response to closed question (E.g., "It's very difficult for young people to acquire homes and cars with inflation as it is.")	17.2
8. Other	10.9
9. D.K.	3.4
	100.0
	(N) (320)

^a The question read: "We are also interested in *why* people think one problem is more important than another. For example, can you say why you think [R's answer to closed question] is more important than the threat of nuclear war?" Data are combined from July and December, 1983; the distributions of responses for the two months do not differ significantly.

closed form why they made a different choice.⁴ A coding of their open answers to this follow-up question is provided in Table 2.

Although such after-the-fact explanatory answers must be treated with caution, they seem in this case to provide some genuine insight into why the threat of nuclear war is mentioned so infrequently in Table 1. If we put aside the proportion (17 percent) who simply reiterated that the problem they chose (unemployment or inflation in most cases) was a very important one, there were three major explanations, which were sometimes given in combination.

The most frequent explanation was that nuclear war is something to worry about for the distant future, but that unemployment/inflation/budget cuts is an important problem here and now. "I know nuclear war could happen, but it's not an everyday problem," said one respondent. The second most frequent explanation given was out-and-out

⁴ The same follow-up question was asked in both July and December, 1983. The proportions giving various answers did not differ significantly between the two months, despite the higher frequency of the nuclear war choice in the latter month, and we have therefore combined the two samples of follow-up responses in Table 3 in order to provide a more adequate number of cases for review. The exact wording of the follow-up question is given in the footnote to Table 2.

denial that a nuclear war is possible: "Nobody is crazy enough to start a nuclear war." Finally, the third type of explanation frequent enough to call for a separate category was that the problem is one the respondent can do nothing about. This last explanation, which was the least frequent, is the only one where the threat of nuclear war might possibly be seen as judged truly most important by the respondent despite not being given as a spontaneous answer. The other two substantive categories really involve denial, the one in an absolute sense, the other by projecting the issue into a fairly distant future. In the latter case, the respondent may not be much more worried about nuclear war than he or she would be on reading about the likelihood of another ice age in some thousands of years. Even where the probability of future disaster is more imminent, as in the case of earthquakes for Californians, there is not much evidence that this creates *continuing* concern on the part of the local population.

The explanations for unemployment or inflation that are merely repetitions of the original choice also suggest that the respondent does not treat the threat of nuclear war as a very serious possibility when confronted with it, though we should also note that such repetitions tend to be given disproportionately by those with lesser education. Considering other demographic correlates, the most striking is that for sex: men are nearly twice as likely as women to deny the possibility of a nuclear war ($p < .001$), and women are nearly twice as likely as men to say that a nuclear war is out of anyone's personal control ($p < .01$). Seeing nuclear war as a distant problem is not disproportionately characteristic of either sex, but it is significantly more frequent among younger than among older persons. (The same is true for more as against less educated persons, though age is the stronger correlate here.) None of these correlates modifies the basic outcome of the follow-up inquiry: respondents have little difficulty explaining why they do not consider the threat of nuclear war to be the most important problem facing the country today.

CHANGING THE FRAME OF REFERENCE: FROM NATION TO WORLD

We took one further step to make certain that the MIP question was not inadvertently missing potential nuclear war responses. Since the question refers to problems facing "this country today," it is conceivable that respondents are led to think primarily of domestic or purely national issues, whereas nuclear war may come to mind mainly within a larger international frame of reference.

To check this possibility, we carried out a split-ballot experiment in November 1985 in which the standard open MIP question was paired with a version identical in every respect except for substituting the

phrase "the world" for "this country." With this new phrasing ("What is the most important problem facing the world today?"), respondents concerned about the threat of nuclear war are provided full opportunity—in fact, almost encouraged—to give such an answer.

The national telephone sample for this new experiment was small, but the results are unequivocally negative. Of the 56 people who received the standard "country" version, only 16 percent mentioned nuclear war; of the 46 people who received the "world" version, 19 percent mentioned nuclear war—a trivial and nonsignificant ($X^2 = 0.2$) increase. The new version of the question did produce more apparently world-related responses like "hunger," and it did not elicit typically domestic economic answers like "unemployment." Yet "nuclear war" did not increase appreciably as a result of the broader international frame of reference.

Overall, our experimental and related follow-up investigations show that it is incorrect to assume that the nuclear war threat has an underlying importance for Americans not revealed in their open responses. The main reason that nuclear war was not given as a response to the open question in much of 1982 and 1983 appears to be that it was not seen to be of paramount importance by respondents, not that it failed occur to them. Even when it was suggested as part of a set of closed alternatives, its selection did not increase greatly. And when asked why not, most respondents reported that it was either not a real problem or not a pressing one as compared with the other problems they saw. Finally, when encouraged to think of problems at the world level, there is still little or no increase in mentions of nuclear war.

THE SUDDEN EMERGENCE OF THE PERCEIVED NUCLEAR THREAT

Between July 1983 and December 1983, "the threat of nuclear war" category rose by 17 percent on the open form of the question and by 16 percent on the closed form (see Table 1). Why did this large increase occur? One of the best publicized news events about nuclear war in the last months of 1983 was the television showing of a film, *The Day After*, about the effects of such a war. The film received so much advance publicity that the Secretary of State appeared on television immediately after its showing in order to justify government policy on arms control. Moreover, an estimated 100 million people watched the program, one of the largest television audiences in the country's history (*The New York Times*, November 27, 1983, p. 11). It seems plausible that the film increased the salience of nuclear war and thus accounted for at least some of the increase in the category on both forms.

The television film was shown on November 20 and our December survey began just three days later. We asked respondents who re-

ceived the open form of the MIP question in December if they had seen *The Day After*. Some 57 percent said they had seen all or part of it, 43 percent none of it. But there is little or no evidence of any effect from the film on mention of nuclear war: 26 percent of those who saw the film mentioned nuclear war on the open form, while 21 percent of those who had not seen it gave the same mention ($p = \text{n.s.}$). Moreover, if the data are separated into 10-day periods, the difference between viewers and nonviewers was smallest (a mere 1 percent) in the first 10-day period. These findings do not prove that the program had no effect on the public, but they do suggest that if there was an effect it was due to the general publicity surrounding the film, not the actual viewing of the film itself. There is one other possibility worth noting: *The Day After* dealt with the consequences of a nuclear war, not at all with its likelihood; perhaps a major television broadcast focusing on the probability of a nuclear war would have more impact on public beliefs of the kind tapped by the MIP question.

A series of real events may well have done much more than publicity about the film to raise public concern about nuclear war between July and December of 1983: news reports about European mass resistance to nuclear missiles; the shooting down of a South Korean airliner by the Soviet Union on September 1 with the loss of 269 passengers and crew; the bomb attack that killed 241 marines in Lebanon on October 23; the invasion of Granada on October 25; and finally the Soviet break-off of arms control talks in late November and early December. At the same time, diminished concern over unemployment and inflation left much of the public (and of the news media) freer to focus on the threat of war. Assuming that all these factors played some role in the dramatic change in responses to the MIP question, both forms of the question picked up the change to about the same degree in our December survey.

MEDIA REPORTS

In order to try to measure indicators of the link between actual events and respondent perceptions of problems, we analyzed a detailed listing of the topics covered by the evening national news broadcasts for the three major television networks (ABC, CBS, and NBC) for each of our survey months plus the just preceding month.⁵ Each news story was counted if it dealt with inflation, unemployment, nuclear war (including international talks aimed at reducing nuclear weapons), or

⁵ Based on the Index in each monthly volume of the *Television News Index and Abstracts*, published by the Vanderbilt Television News Archives, Vanderbilt University Library.

Table 3. Number of Evening News Reports Dealing with Four Topics^a

	Mar.-Apr. 82	May-June 82	Sep.-Oct. 82	June-July 83	Nov.-Dec. 83
Inflation	12	12	13	11	11
Unemployment	14	18	62	22	14
Nuclear war	71	46	29	63	104
Budget	88	62	33	10	8

^a Indicators counted in the Vanderbilt Television News Archive Indexes

Inflation:	Reports on the Consumer Price Index or the Wholesale Price Index
Unemployment:	Reports on unemployment or employment
Nuclear war:	Reports on nuclear war, atomic weapons, missiles, disarmament, antinuclear demonstrations
Budget:	Reports on federal budget

budget issues. There are important limitations to these data, since we did not have access to broadcast tone or detailed content (e.g., reports on arms control talks might have been optimistic or pessimistic), and in the case of the budget, reports did not necessarily imply budget *cuts*. Still, the data are of some value if these qualifications are borne in mind. The results are presented in Table 3.

Nuclear war and related issues were mentioned frequently in news reports in the first half of 1982, then dropped to a lower level, only to rise to their highest frequency at the end of 1983. The last time point fits our trend survey data for December 1983, but the early time point is higher than the questionnaire responses might lead one to expect. It seems likely that it was the *conjunction* in late 1983 of the more general reports on Soviet-American tension (e.g., the Korean jet liner) and the increase in specifically nuclear-related reports (break-off of disarmament talks) that accounted for the abrupt rise at the end of that year in mentions of the threat of nuclear war on both open and closed forms. More routine reports touching on nuclear arms in early 1982 apparently did not greatly affect public definitions of important problems. These had been primarily stories about ongoing arms control negotiations and about the nuclear freeze movement, but they were not accompanied by direct evidence of military action or of sharply increased Soviet-American tension.

The media results support our earlier conclusion that the enduring threat of nuclear war is not seen as paramount in importance by the public. It is only when the possibility of war is heightened by concrete events that the nuclear threat becomes important, and even then it may be involvement in a particular war (as in Vietnam or potentially in Central America), rather than the threat of a nuclear war, that usually becomes the focal issue.

Other Open-Closed Question Differences

Although our primary concern with open-closed form differences stemmed from our interest in the nuclear war response, it is useful to draw more broadly on the five survey experiments to determine whether question form had effects in ways not directly connected with our hypothesis about the nuclear response as such.

At the gross level of ranking of issues by the public, the answer is no. For four of the five time points, the rankings of the four common category issues are identical on the open and closed question forms, and for the remaining time point (July 1983) there is only a single minor reversal between ranks 2 and 3. Thus, if interest is only in discovering which issues are most frequently chosen as "most important," our evidence is that the two forms will ordinarily lead to the same conclusions, assuming, of course, that the closed form includes as alternatives the main issues that come to the fore on the open form.

However, closer examination of the open-closed comparisons provided by Table 1 leads to the following additional conclusion: the less frequently an issue is mentioned spontaneously to the open MIP question, the greater its increase in choice on the closed question. At the extreme, "budget cuts" is a response that is never given by more than 3 percent of the population to the open question, but it is chosen several times more often when offered as a closed alternative. That this example is not simply an accident due to peculiarities of the budget cut issue, to sampling error, or to the use of percentage scales is shown by a systematic analysis of all common categories with frequencies transformed into logits. "Budget cuts" represents only the extreme case of what is a quite general effect in these data across categories and across months for any given category.⁶

A plausible interpretation of this effect is that the closed question form makes all responses equally salient and that some people choose as most important an alternative such as "budget cuts" that would not otherwise have come to mind. Who are the people most likely to do this? It is useful to think of the closed common category samples as composed of two parts: those people who would have mentioned one

⁶ Space constraints prevent inclusion of this analysis, but a copy can be obtained by writing to the first author. It should be noted that had we not had the budget-cut category and not looked systematically at these effects, the open to closed increase for the nuclear war response might well have been confounded with the more general open to closed effect, since the nuclear war open category was relatively small in the first four surveys. In that case, the original hypothesis about artifactual constraint on the nuclear war response in the open form would have been treated as confirmed. As it is, we can see that the open-closed difference is a general one, likely to apply to any reasonably important issue that is seldom mentioned spontaneously to the open MIP question.

Table 4. Unemployment and Inflation Responses and Rates by Month and Question Form

<i>Responses and Rates</i>	<i>April 1982</i>	<i>June 1982</i>	<i>October 1982</i>	<i>July 1983</i>	<i>December 1983</i>
Unemployment					
Open form	28	28	43	42	22
Closed form	43	39	46	45	28
Inflation					
Open form	16	16	6	5	2
Closed form	22	23	22	20	15
Rate of unemployment	9.0	9.4	10.2	10.0	8.4
Rate of inflation	7.6	6.6	5.9	3.4	3.9

NOTE: Response percentages are taken from Table 1, rounded off. The inflation rate is that for the second month preceding the month shown; the unemployment rate is that for the month preceding the month shown.

of the four common categories even on the open question, and those who would not have given a common category open response but who feel constrained on the closed form to choose among the common categories. It seems likely that it is mainly the latter set of people who migrate disproportionately to the low-frequency common categories. Such an interpretation will require panel data for more definite confirmation, but we can predict that almost any intrinsically important but seldom mentioned issue will show a relatively large jump in popularity when added to a limited set of MIP closed alternatives.⁷

There is one other slighter effect that may also characterize differences between open and closed MIP question forms, though its reliability is less certain. The open question seems to be somewhat more sensitive to changes in both external events and media attention to these events. This is best seen by tracing over time the trends by form for the common categories of unemployment and inflation. The percentages are reproduced in Table 4, together with U.S. government data on the unemployment and inflation rates for the same period.⁸

⁷ Another process that would tend to increase the size of the smaller common categories on a closed form would be random choices by part of the sample. However, such "guessing" would be expected to occur particularly among less educated respondents, yet the small "budget cuts" category does not show a systematic relation to education on either question form. Thus there is no evidence that guessing plays a significant role in these closed question choices.

⁸ The unemployment rate is the civilian unemployment rate, which is seasonally adjusted. The inflation rate was computed by dividing the CPI-U (Unadjusted Consumer Price Index) for each month by the CPI-U for the same month during the previous year. This figure is therefore also seasonally adjusted. Both rates were reported early in each month-long period in which our survey took place, though one (inflation) is regularly based on data from two months earlier and the other (unemployment) from one month earlier.

Mention of unemployment rises on the open form from 28 percent in April 1982 to 43 percent in October 1982, then drops to 22 percent in December, with the response curve following the curve of the unemployment rate fairly well. Moreover, the major increase in mention of unemployment occurs at the point that the unemployment rate was in the process of "breaking" the 10 percent threshold, a change that received a great deal of attention from the media (see Table 3). On the closed form, however, unemployment shows little or no rise in mentions between April 1982 and July 1983, then a noticeable decline of 20 points in December 1983. With the exception of the last drop, the closed form seems to track somewhat less well the changes in unemployment rates that were an important part of the period under study.

Mention of inflation decreases on the open form from a high of 16 percent in April 1982 to a low of 2 percent in December 1983. The inflation rate itself declined fairly steadily over the period of our study, though perhaps equally important was the fact that it had dropped substantially from the double-digit levels of 1979 and 1980. On the closed form, however, there is little decline at all in the mention of inflation through July 1983, despite the continued drop in the inflation rate, and even the apparent decline of 5 percentage points on the December closed form is small and nonsignificant.

However, none of the open-closed differences over time for unemployment and inflation can be shown to be statistically reliable. If responses are regressed on rates, although the unstandardized coefficients for open responses are larger than those for closed responses for both unemployment (12.2 vs. 8.6) and inflation (3.2 vs. 1.3), the differences do not reach significance ($p > .10$) with this small number of time points. Nor can the more important specific interactions of response-by form by time be shown to be significant, such as the greater jump for the open than the closed unemployment category in October 1982. Thus the form difference just outlined, though theoretically plausible and seemingly visible to the eye, remains uncertain in reliability.

Conclusions

Two general hypotheses were investigated in order to account for the apparent lack of public concern over the threat of nuclear war, as indicated by infrequent mention of nuclear war to the standard open question about the most important problem (MIP) facing the country today. The first hypothesis was that the nuclear war issue was seldom mentioned because it is less salient on a day-to-day basis than other issues, despite the fact that at a deeper level the public considers it to

be of paramount importance. We tested this hypothesis by including in a specially created closed form of the MIP question the alternative "threat of nuclear war," on the assumption that a substantial proportion of respondents who did not think of it spontaneously would nevertheless recognize its importance and select it from among the four closed alternatives. Results of five open-closed comparisons failed to confirm this hypothesis: the proportion of nuclear war responses rose on the closed form, but not generally more so than did other alternatives included on the same form. Furthermore, altering the frame of reference of the question to emphasize world rather than national problems increased mentions of nuclear war by only a trivial and nonsignificant amount.

A second hypothesis was that the failure of nuclear war responses to be given frequently to the MIP open question means essentially what it says: over much of the past four decades, most Americans have regarded the threat of nuclear war as less important than other major problems. The lack of a systematic open-closed difference for the nuclear war category is consistent with this hypothesis, and in addition further evidence is found in respondent explanations for why they did *not* choose the nuclear threat alternative on the closed question. Many people said they did not believe a nuclear war to be possible, and many others claimed that the threat is too far in the future to compete with what they saw as current pressing problems. Although one cannot rule out the possibility that such denial may be serving a protective psychic function (Lifton and Falk, 1982), at this point the burden of proof should be on those who offer such an explanation. The fact that nuclear war responses increased sharply in frequency on *both* question forms in late 1983 suggests that Americans are quite capable of giving the responses when events occur that seem to make the possibility of a major war more immediate.

A secondary purpose of our study was to continue the investigation of open/closed question differences begun by Schuman and Presser (1981). In the present comparison of open and closed versions of the MIP question at five points in time, we did not find gross differences in the ranking of problems between question forms. However, we did identify one form difference that seems likely to be quite general: the smaller a category is on the open form, the larger its increase on the closed form. A second possible form difference, which is less reliable in these data, is the somewhat greater responsiveness of the open question to changes in external events, such as a sharp rise in the unemployment rate or in the amount of media attention to such a rise.

However, the role of salience *per se* in influencing answers to the MIP and similar questions is severely constrained by question wording

that calls for judgments within the framework of "importance" to the nation. Mere conspicuousness of an issue in news broadcasts or elsewhere is not likely to turn it into a frequently cited concern unless the public judges it to be of genuine significance. Thus, for all the attention Americans lavish on sports, not a single respondent in our five surveys mentioned an issue connected with sports as "most important," nor for that matter were there references to front-page crime stories or sensational scandals. Thus if there is something wrong with the ranking of nuclear war as less important than more transient domestic issues—including one as fleeting as difficulties due to an extreme cold spell—this has to do primarily with limitations in the public's judgment in dealing with an intangible future, not with the questions that assess that judgment. Observers who have witnessed the proliferation and spread of nuclear weapons over the past 40 years with little public protest should not find this conclusion difficult to comprehend.⁹

References

- Cannell, Charles F., and Robert L. Kahn
 1968 "Interviewing." In G. Lindzey and E. Aronson (eds.), *The Handbook of Social Psychology*. Vol. 2, 2nd ed. Reading, MA: Addison-Wesley Publishing Co.
- Dyson, Freeman
 1984 *Weapons and Hope*. New York: Harper & Row.
- Ehrlich, Paul R., et al.
 1983 "Long-term biological consequences of nuclear war." *Science* 222: 1293-1300.
- Gallup Poll, The
 1982 News release. February 7.
- Iyengar, S., M. D. Peters, and D. R. Kinder
 1982 "Experimental demonstrations of the not-so-minimal consequences of TV news programs." *The American Political Science Review* 76: 848-58.
- Lifton, Robert Jay, and Richard Falk
 1982 *Indefensible Weapons*. New York: Basic Books.
- McCombs, M.
 1981 "The agenda setting approach." In D. Nimmo and K. Sanders (eds.), *Handbook of Political Communication*. Beverly Hills: Sage Publications.
- MacKuen, Michael
 1981 "Social communication and the mass policy agenda." In M. MacKuen and S. Coombs (eds.) *More Than News*. Beverly Hills: Sage Publications.

⁹ Of course, media or other attention may be necessary (even though not sufficient) to help the public conceptualize an issue, so that having an "unemployment rate" or an "inflation rate" helps focus public attention. But an even more important factor in shifts in response to the MIP question is its relative nature: one issue may gain or lose in apparent importance simply because another loses or gains, just as the size of a news story is determined by what other stories are available at the same time. Quite likely such relativity accounts in good part for the fact that war-related responses to the MIP question have continued at high levels since 1983, as indicated by Gallup Monthly Reports (e.g., 30 percent in January 1986). The absence of high unemployment and inflation over recent months has allowed issues of war (though not necessarily nuclear war) to move to center stage with relatively little competition.

Miller, Warren E., et al.

- 1981 American National Election Studies Data Sourcebook: 1950-1980. Cambridge, MA: Harvard University Press.

Schuman, Howard, and Stanley Presser

- 1981 Questions and Answers in Attitude Surveys: Experiments on Question Form, Wording, and Context. New York: Academic Press.

Scott, William A.

- 1968 "Attitude measurement." In G. Lindzey and E. Aronson (eds.), *The Handbook of Social Psychology*, Vol. 2, 2nd ed. Reading, MA: Addison-Wesley Publishing Co.

Smith, Tom W.

- 1980 "America's most important problem—a trend analysis, 1946-1976." *Public Opinion Quarterly* 44:164-80.

Taylor, Shelley E., and Susan T. Fiske

- 1978 "Salience, attention, and attribution: top of the head phenomena." In L. Berkowitz (ed.), *Advances in Experimental Social Psychology*. Vol. 11. New York: Academic Press.

Ecological Concern, Attitudes, and Social Norms in Voting Behavior

**JAMES D. GILL, LAWRENCE A. CROSBY,
AND JAMES R. TAYLOR**

BEHAVIORAL scientists have shown considerable interest in public attitudes toward issues of environmental quality. This interest coincides with the continuing development of an environmental movement pressing for ecologically responsible production and consumption as the means for controlling environmental problems. The research on environmental attitudes has focused on identifying the social bases of "ecological concern," developing and improving measures of such concern, and investigating the effects of concern on environmental planning, public policy making, and citizen's behavior (see reviews by Van Liere and Dunlap, 1980, 1982). Unfortunately, reviews of the environmental literature have regularly omitted the stream of research conducted by consumer behavior scientists. This research parallels the work reviewed by Van Liere and Dunlap (1980, 1982), even to the extent that articles fall into the same three categories.

Abstract Using a theoretical framework not previously tested in environmental research, this study investigates the indirect relationship between ecological concern and voting behavior. Results indicate that the effects of ecological concern are mediated by attitudinal, normative, and behavioral intention variables. The results also provide a partial test of the validity of Ajzen and Fishbein's Theory of Reasoned Action. Key environmental, public policy, and communications implications are discussed.

James D. Gill is Assistant Professor of Marketing and Lawrence A. Crosby is Associate Professor of Marketing, in the College of Business, Arizona State University, Tempe, Arizona 85287. James R. Taylor is the S.S. Kresge Professor of Marketing, Graduate School of Business Administration, University of Michigan, Ann Arbor, Michigan 48109. The authors gratefully acknowledge financial support provided by the College of Business, Arizona State University and by S.S. Kresge Research Funds. The authors also wish to thank an anonymous reviewer for technical contributions made to the manuscript.

First, there have been numerous attempts to determine the antecedents of ecological concern, especially as they relate to the bases of market segmentation (e.g., Crosby and Gill, 1981; Murphy, 1978; Brooker, 1976; Henion and Wilson, 1976; Webster, 1975; Kinnear et al., 1974). Second, efforts have been made to develop or improve ecological concern measures (e.g., Antil and Bennett, 1979; Henion, 1976; Kinnear and Taylor, 1973). Third, several assessments of the impact of ecological concern on consumption and voting behavior have been conducted (Crosby and Taylor, 1982, 1983; Crosby et al., 1981; Lepisto, 1979; Henion, 1976; Kinnear and Taylor, 1973; Herberger and Buchanan, 1971; Kassarian, 1971). Generally, the research indicates that ecological concern is related to, but is not highly correlated with, consumption behavior. Although often a good explanatory variable of group (market segment) behavior, prediction at the individual level proves difficult. This conclusion parallels that of social and behavioral scientists who have expressed reservations about the value of attitude data in environmental research (e.g., Endo and Nielsen, 1974).

The weak relationship between ecological concern and behavior may mean that it is not an important explanatory variable. A more interesting possibility, however, is that ecological concern has an indirect rather than direct influence on behavior, with its influence being gradually diminished through successive levels of intervening variables. This view is consistent with Dunlap (1975) and Mazmanian and Sabatier (1981), who argue that a person's willingness to act upon his environmental attitude is subject to certain mediating influences (e.g., environmental issue salience, situational circumstances, individual differences). The researcher's theoretical perspective, of course, determines the hypothesized intervening variables and their relationships.

Van Liere and Dunlap (1982) state that "since progress toward the solution of environmental problems is likely to depend more on proenvironmental behaviors than proenvironmental attitudes, the reasons for the weak relationship between environmental attitudes and behaviors and the conditions under which it can be strengthened clearly deserve examination."

Research Purpose

The purpose of this study is to investigate the possible indirect relationship between ecological concern and environmental behavior. The objective is to identify a set of intervening variables which mediate the effects of concern on behavior. In assessing this relationship, a theoretical framework not previously applied in studies of ecological concern

will be used. This perspective is the multiattribute or expectancy-value approach for modeling attitudinal influence.

Ajzen and Fishbein's Theory

Perhaps the most widely researched model in consumer behavior is based on Ajzen and Fishbein's Theory of Reasoned Action (Page, 1982). Introduced in 1967 (Fishbein, 1967), the theory has been developed, refined, tested (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975), and applied in numerous contexts, including voting behavior, family planning, occupational choice, and brand choice (see reviews by Farley et al., 1981; Ajzen and Fishbein, 1973). The theory posits that people consider the implications of their actions and form intentions before engaging in a behavior. According to the theory, the determinants of behavioral intention are attitude toward the behavior and subjective norm (perceived normative expectations of various important others in the social environment). The determinant of attitude is cognitive structure, i.e., beliefs that the behavior leads to certain outcomes (b_i) and the evaluations of those outcomes (a_i). The determinant of subjective norm is normative structure, i.e., beliefs about the normative expectations of specific referents (nb_j) and the motivation to comply with those expectations (mc_j).

Ajzen and Fishbein (1980) relegate attitudes toward targets or objects (e.g., *the environment*, people, institutions) to the role of external or exogenous variables.¹ An integral part of the theory (i.e., the sufficiency assumption) is that external variable influences on behavior and/or behavioral intention are completely mediated by the set of endogenous variables representing the model's normative and attitudinal components (Loken, 1982).² In terms of the effects of ecological concern on environmental behavior, the implication is that this relationship will be indirect and possibly limited in magnitude. At the same time, ecological concern should have a direct and therefore much stronger influence on cognitive and normative structure.

Despite the logical appeal of the Theory of Reasoned Action, empirical research has provided only partial support for the theory's stated relationships (Loken 1982; Page, 1982). Inconsistent results have been found with respect to the mediating role of intentions and the validity of the sufficiency assumption. For example, Bagozzi (1981) found the

¹ In this study an external (i.e., exogenous) variable is defined as one whose variability is assumed to be determined by causes outside the model under consideration.

² Endogenous variables are defined as those whose variation is explained by exogenous and other endogenous variables in the causal model under consideration.

attitudinal components of the model influence behavior only through their effect on intentions, which is consistent with the theory. In contrast, Bentler and Speckhart (1979) found behavior was directly rather than indirectly influenced by attitude toward the act. In a later study (1981), they found that attitude toward the act had both direct and indirect effects on behavior (i.e., behavioral intention partially mediated attitudinal influence). However, conclusions drawn from the Bentler and Speckhart studies require qualification, as the authors did not operationalize the attitude model according to recommended procedures and were focused on habitual or addictive rather than reasoned behavior.

Tests of the sufficiency assumption have also produced mixed results. Crosby and Muehling (1982), for example, found that external variables do have a significant direct effect on behavioral intention. In fact, one of the five external variables tested had a direct effect, yet no mediated effect on behavioral intention. Conversely, Loken (1982) found that external variables do not have a significant effect on behavior above that mediated by attitude toward the behavior and subjective norm. Although the focus of these studies differed (i.e., behavioral intention versus behavior), conclusions drawn from their results raise new questions about the validity of the sufficiency assumption.

Other questions have been raised concerning the possible interdependency of cognitive and normative structure variables (Miniard and Cohen, 1979, 1981). Fishbein and Ajzen have acknowledged the possibility of interdependence through the inferential formation of cognitive (1975:304) and/or normative beliefs (1975: 304, 306, 314). While in theory an inference could be made in either direction, a causal link from normative expectations to cognitive belief is most consistent with prevailing notions about the social influence process. Also, Ryan (1982) presents empirical evidence that cognitive structure is more a function of normative structure than vice versa.³

A test of the theory's stated and implied relationships, and its ability to explain the link between ecological concern and environmental behavior (see Figure 1), should contribute to a resolution of these construct and nomological validity issues. Further, such a test may improve understanding of how generalized environmental attitudes are translated into specific environmental behaviors. The hypotheses expressed below were formulated from specific relationships suggested

³ Conclusions drawn from the Ryan (1982) study must be interpreted cautiously as the author's models were tested mainly on the basis of the chi-square, and no goodness-of-fit indices were computed. Further, a small sample was examined and no models successfully passed the overall chi-square goodness-of-fit test.

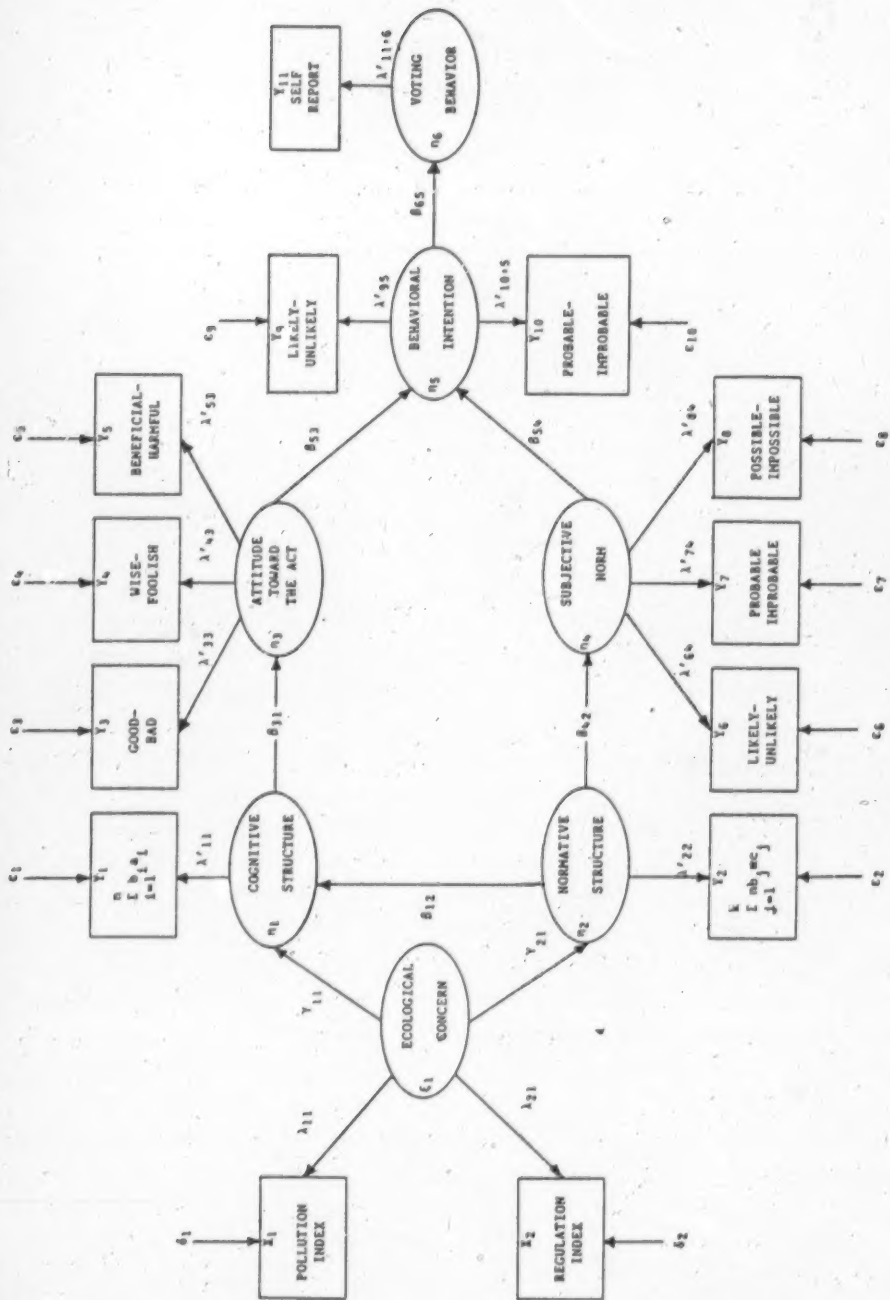


Figure 1. Specification of A Priori Causal Model

by the Theory of Reasoned Action and previous environmental research:⁴

- H1: Relationships between cognitive structure, attitude toward the act, normative structure, subjective norm, behavioral intention, and behavior are as suggested by the Theory of Reasoned Action (see Figure 1).
- H2A: Ecological concern has an indirect, but no direct relationship with environmental behavior.
- H2B: Ecological concern has an indirect, but no direct relationship with behavioral intention.

Method

DATA

The environmental attitude-behavior relationship was tested in a public policy/marketplace research setting. The fate of container laws or "bottle bills" is an environmental issue of current public and research interest. Since 1972, laws requiring deposits on beverage and other recyclable containers have been passed in nine states through voter initiatives and legislative action.⁵ Continuing congressional interest in enacting federal legislation requiring container deposits has placed this issue squarely on the public agenda. The data for the analysis were from a study of voter/consumer behavior on bottle bills appearing on the November 2, 1982 ballots in California and Colorado. Although there were minor differences in the language and legislative effect of the two bills, they were essentially similar propositions.

A quota sample of households in these states was obtained from a national consumer panel. Households were selected for inclusion by matching four household characteristics with known census data for each state. The characteristics were population density, age of head, household income, and household size. A random selection procedure was used to select an eligible adult voter within each household. The questionnaire, preceded by a prealert postcard, was mailed 14 days before the election to 500 target individuals in each state. A standard inducement was offered to panel members. A total of 662 completed

⁴ Ajzen and Fishbein (1980) have suggested that external variables may moderate the relative influence of Aact and SN on BI. In statistical terms, this implies that the external variables interact with the endogenous variables to affect behavioral intention indirectly. However, no theoretical reason could be identified to suggest that ecological concern would have a moderating effect on behavioral intention or behavior.

⁵ States with container deposit laws include Connecticut, Delaware, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont.

surveys were returned (a 66.2 percent response rate). In the week after the election follow-up telephone interviews were completed with 447 mail survey respondents and 100 nonrespondents to determine actual voting behavior (self-reported).

The sample was somewhat overrepresentative of adults registered to vote (79.7 percent). In 1982, the estimated percentage of registered adults was 68.3 percent in Colorado and 63.7 percent in California. Similarly, turnout of registered voters within the sample (94.2 percent) was higher than the estimated voter turnout in Colorado and California of approximately 70 percent.⁶ A difference was also noted between the California vote projection of 51.6 percent yes, 48.4 percent no (based on 246 telephone respondents' self-reports) and the actual vote outcome of 44.1 percent yes, 55.9 percent no ($\chi^2_1 = 5.97$; $p < .05$). However, the projected vote outcome for the Colorado sample (based on 227 telephone respondents' self-reports), 27.7 percent yes, 72.3 percent no, does compare favorably to the actual vote outcome of 25.5 percent yes, 74.5 percent no ($\chi^2_1 = 0.60$; $p < ns$).

MEASURES

The items of measurement included components of the Fishbein attitude model, attitude statements pertaining to ecological concern, involvement, lifestyle, and values orientation. Only the first two categories of information are relevant to this analysis.

In an effort to improve the measurement of ecological concern, researchers have turned to the use of multiple-item rather than single-item indicators and increasingly relied on standardized measures. However, as noted by Van Liere and Dunlap (1982) existing measures of ecological concern differ in terms of (1) the extent to which they incorporate different environmental issues, and (2) assumptions of what constitutes an "expression" of concern. Not surprisingly, early tests of the degree of intercorrelation among standardized measures produced mixed results.

More recently, Van Liere and Dunlap (1982) tested the intercorrelation among six different ecological concern scales. Three of the scales dealt separately with issues central to the environmental controversy (e.g., pollution, natural resources, and overpopulation). Additional indices were constructed to reflect different "expressions" of ecological concern (e.g., favor government environmental regulation, favor government environmental spending, engage in environmental protection

⁶ The noted differences may reflect nonresponse bias, self-report inaccuracies, or possible imperfections in the consumer panel (e.g., underrepresentation of highly mobile people). Although the authors do not believe these differences invalidate the investigation of hypothesized effects we cannot rule out selection artifact bias.

behaviors). They found that the overpopulation index and environmental behavior scale were only weakly linked to the other four indices. Conversely, the pollution, natural resources, government regulation, and government spending scales were highly correlated. Van Liere and Dunlap (1982) concluded that "environmental concern may be a fairly broad concept, but one that is best represented by concern about pollution and natural resources."

This study's approach to measuring ecological concern was patterned after Van Liere and Dunlap (1982). Since the intent was to measure concern as an attitude, all 10 items composing the Maloney et al. (1975) affect (A-) scale were included in the battery. Also included were the five attitude (as opposed to behavior) items from Kinnear and Taylor's (1973) Ecology Scale and the six attitude items from Antil and Bennett's (1979) Socially Responsible Consumption Behavior Scale. Each item had a seven-category response format ranging from "strongly disagree" to "strongly agree." Responses were coded from 1 to 7 (reverse coded where item wording required) so that higher scores indicated more concern. The 21 items in the item pool were then sorted on an a priori basis into two categories: those dealing with pollution and natural resource problems and those focusing on regulation and spending approaches to combating those problems (see Appendix). Separate scales formed by summing responses to the attitude items were found to have acceptable levels of reliability ($\alpha_1 = .86$ and $\alpha_2 = .86$, respectively).

Operationalization of the Ajzen and Fishbein model required the identification of salient outcomes and referents prior to the construction of endogenous variable measures. A free-elicitation technique common to this type of research (Ryan and Etzel, 1976) was employed in a pretest of 73 respondents. A content analysis of elicited responses identified 21 separate outcomes and 14 distinct referents (see Appendix) about which cognitive and normative measures were developed.

The measurement approach and format suggested by Ajzen and Fishbein (1980) was applied in assessing the endogenous variables specified by the Theory of Reasoned Action. However, multiple items were used to measure each model component so as to avoid bias from adjective specificity (Ryan, 1982). The adjective pairs that anchored the ends of the scales were taken from previous research. For example, the components of cognitive and normative structure were measured as follows:

- (b₅) My voting "yes" on the beverage container law would reduce the amount of solid waste that has to be burned or buried.
- | | | |
|----------|-------|------------|
| likely | _____ | unlikely |
| probable | _____ | improbable |

- (a₅) Reducing the amount of solid waste that has to be burned or buried is . . .
 good _____ bad
 wise _____ foolish
- (nb₁₀) Most other consumers think I should vote "yes" on the beverage container law.
 likely _____ unlikely
 probable _____ improbable
- (mc₁₀) Generally speaking, I want to do what other consumers think I should do.
 likely _____ unlikely
 probable _____ improbable

Bipolar (+3 to -3) coding was used for all scales except for the motivation to comply items (scored 7 to 1). Ajzen and Fishbein (1980) have suggested this *mc_j* scoring method in response to criticism that such items are not viewed by respondents as bipolar (for details, see Miniard and Cohen, 1981; Ajzen and Fishbein, 1980; Fishbein, 1976). The index of cognitive structure was formed by averaging the scales representing each component, multiplying corresponding beliefs and outcome evaluations, then summing across outcomes ($\sum b_i a_i$). The index of normative structure was computed in an analogous fashion. The adjective pairs used to operationalize attitude toward the act, subjective norm, and behavioral intention appear as indicators (the boxes) in Figure 1.

Analysis and Results

Structural equation analysis (Jöreskog and Sörbom, 1981), as suggested by Andrews (1984), was performed to test the model and identify direct and indirect relationships between the exogenous and endogenous variables. The analysis was conducted using the LISREL VI program which provides a simultaneous test of the structural model (having the form: $\eta = \beta\eta + \Gamma\xi + \zeta$) and the measurement models for the y's and the x's ($y = \Lambda_y\eta + \epsilon$, $x = \Lambda_x\xi + \delta$). The objective of the analysis is to find a set of values for the model parameters which minimizes the difference between the actual and implied correlations among observed variables.⁷ The program employs a maximum likeli-

⁷ Separate analyses were performed using the correlation and covariance matrices as input. While use of the covariance matrix is generally preferred, problems were encountered in terms of not-positive-definite error matrices. These problems were not observed when the correlation matrix was used as input. The difficulty may stem from the (unavoidable) dichotomous coding of voting behavior. Also, the use of interval rather than ratio scale variables is technically a violation of the assumptions of LISREL analysis. Since certain latent variables will not be normally distributed on an a priori basis, the analysis might have been adversely affected.

hood procedure to estimate all nonzero, nonfixed parameters. Paths without arrows in Figure 1 were assumed to be zero. A multigroup analysis, treating California (CA) and Colorado (CO) as separate groups, was performed to test and cross-validate the structural and measurement models.

To enable the program to run, two initial changes in the a priori model were required. First, three observed variables having extremely high correlations with other indicators of the same construct were removed from the analysis (Y_3 , Y_6 , Y_9). Second, to facilitate model identification, the error on voting behavior was fixed at zero ($\theta_{11,11} = .00$).

In the initial test of the a priori model each free parameter was specified to be equal over groups, i.e., to have the same value for California and Colorado. This, a most restrictive test of the model, yielded a fair degree of model fit (goodness of fit: CA = .892, CO = .915), but the model must be rejected on the basis of the chi-square goodness-of-fit test ($\chi^2_{84} = 202.53$, $p < .000$). Although the use of χ^2 as an absolute index of fit is open to question, and there is some agreement that it should be used as a guide rather than as a rule (see review by Bentler, 1980), an effort was made to improve model fit.

A second test of the a priori model imposed a less restrictive requirement that the same pattern of free and fixed elements would exist for both California and Colorado, but not necessarily the same parameter values. This test of the model resulted in an improvement of model fit ($\Delta\chi^2_{26} = 85.94$, $p < .001$; goodness of fit: CA = .918, CO = .965), but the model remained inadequate ($\chi^2_{58} = 116.59$, $p < .000$).

Next, a path linking ecological concern to behavior was included (γ_{61}). However, the addition of this path did not result in an improvement in model fit ($\Delta\chi^2_2 = 3.89$, $p < ns$), and H2A was accepted. Subsequently, and instead, a path linking ecological concern to behavioral intention (γ_{51}) was included in the model. The result of this change was an improvement in model fit ($\Delta\chi^2_2 = 9.56$, $p < .01$; goodness of fit: CA = .924, CO = .967), and H2B was rejected. Despite the improvement in model fit, however, the model remained inadequate according to the traditional chi-square significance criterion ($\chi^2_{56} = 106.93$, $p < .000$). However, for large samples, some suggest that a 2:1 $\chi^2/d.f.$ ratio might be considered reasonable (Wheaton et al., 1977). With a combined sample of 379 complete data cases, the obtained 1.91 ratio seems to suggest the model is adequate or at least nearly so. At this stage of testing, none of the normalized residuals for Colorado exceeded 1.8 and 84 percent were less than one. For California, the largest normalized residual was 1.4, and 95 percent were less than one.

In a final effort to improve fit, some correlated measurement error among selected indicators ($\theta^e_{4,8}$, $\theta^e_{4,10}$) was allowed in the California

Table 1. Standardized Parameter Estimates

Structural Model					Measurement Model				
Parameter	California		Colorado		Parameter	California		Colorado	
	EST	(T-Value)	EST	(T-Value)		EST	(T-Value)	EST	(T-Value)
γ_{11}	.111	(1.90)	.119	(2.21)	λ_{11}	1.000	(*)	1.000	(*)
γ_{21}	.280	(3.45)	.410	(4.98)	λ_{21}	.756	(9.11)	.933	(11.71)
γ_{51}	.126	(3.05)	.062	(1.52)	λ'_{11}	.942	(*)	.942	(*)
β_{12}	.792	(11.32)	.843	(12.60)	λ'_{22}	.879	(*)	.879	(*)
β_{31}	.853	(15.58)	.943	(17.74)	λ'_{33}	**	(**)	**	(**)
β_{42}	.874	(13.06)	.897	(14.93)	λ'_{43}	.987	(*)	.987	(*)
β_{53}	.652	(12.80)	.880	(15.19)	λ'_{53}	.965	(30.74)	.963	(37.77)
β_{54}	.246	(5.07)	.019	(.34)	λ'_{64}	**	(**)	**	(**)
β_{65}	.224	(15.89)	.908	(25.83)	λ'_{74}	.978	(*)	.978	(*)
ψ_{11}	.348	(5.42)	.150	(3.61)	λ'_{84}	.973	(36.57)	.952	(24.95)
ψ_{22}	.910	(7.06)	.844	(6.92)	λ'_{95}	**	(**)	**	(**)
ψ_{33}	.227	(5.31)	.166	(4.81)	$\lambda'_{10,5}$	.984	(*)	.984	(*)
ψ_{44}	.250	(5.05)	.179	(4.34)	$\lambda'_{11,6}$	1.000	(*)	1.000	(*)
ψ_{55}	.224	(5.97)	.158	(6.13)	θ^0_{11}	.111	(1.19)	.232	(2.73)
ψ_{66}	.330	(8.10)	.161	(7.22)	θ^0_{22}	.480	(6.43)	.268	(3.38)
R^2_1	.662		.844		θ^0_{11}	.095	(2.35)	.173	(5.26)
R^2_2	.079		.166		θ^0_{22}	.241	(5.10)	.238	(6.01)
R^2_3	.767		.838		θ^0_{33}	**	(**)	**	(**)
R^2_4	.751		.820		θ^0_{44}	.050	(2.96)	.031	(2.97)
R^2_5	.769		.847		θ^0_{55}	.097	(5.39)	.076	(6.13)
R^2_6	.667		.841		θ^0_{66}	**	(**)	**	(**)
					θ^0_{77}	.044	(2.68)	.070	(3.04)
					θ^0_{88}	.049	(2.98)	.118	(4.92)
					θ^0_{99}	**	(**)	**	(**)
					$\theta^0_{10,10}$	.074	(2.24)	.035	(1.99)
					$\theta^0_{11,11}$	.000	(*)	.000	(*)
					$\theta^0_{4,8}$	-.029	(4.15)	.000	(*)
					$\theta^0_{4,10}$	.039	(2.79)	.000	(*)

* Constrained or fixed parameter, not estimated.

** Parameter involves observed variable deleted from analysis.

group, without theoretical justification. This relaxation of the model had the desired effect of sufficiently improving the model's fit ($\Delta\chi^2 = 30.87$, $p < .001$), such that it accounted quite well for the observed correlations ($\chi^2_{54} = 76.06$, $p < .026$). Although the χ^2 was still rejected at the .05 level, other indicators of model fit (goodness of fit: CA = .956, CO = .967) suggest the model is tenable, and that freeing additional parameters would essentially involve overfitting. The parameter estimates for this final model are reported in Table 1. Particularly noteworthy, is the substantial amount of variance explained in the endogenous variables except for normative structure. The explained variance is typically in excess of 80 percent for Colorado and 70 percent for California, with behavior being one of the variables accurately predicted.

As stated in H1, the endogenous variables were related in the manner specified by the Theory of Reasoned Action. That is, cognitive structure was linked to attitude toward the act ($\beta_{31} = .853$ for CA; $= .943$ for CO) which, in turn, influenced behavioral intention ($\beta_{53} = .652$ for CA; $= .880$ for CO). Normative structure was linked to subjective norm ($\beta_{42} = .874$ for CA; $.897$ for CO), which had a significant relationship with behavioral intention in California ($\beta_{54} = .246$) but not Colorado ($= .019$). A strong relationship between normative and cognitive structure was found to exist ($\beta_{12} = .792$ for CA; $.843$ for CO), suggesting that behavioral beliefs may be influenced by inference(s) drawn from the content of normative structure.

Environmental voting behavior was influenced by behavioral intention ($\beta_{65} = .824$ for CA; $= .908$ for CO), but was not directly linked to ecological concern. This result lends support to the sufficiency assumption. Conversely, ecological concern had a direct influence on behavioral intention, significant in the case of California ($\gamma_{51} = .126$) but not Colorado ($= .062$), which is inconsistent with the sufficiency assumption. It should be noted, however, that the relative strength of this association was slight.

Examination of the path coefficients connecting ecological concern to cognitive and normative structure reveals generally weak relationships in comparison to the relationships between the model's endogenous variables. The link from concern to cognitive structure was barely significant in Colorado ($\gamma_{11} = .119$) and nonsignificant in California ($\gamma_{11} = .111$). Normative structure was found to be somewhat more dependent on ecological concern in both states, although the coefficients were still modest ($\gamma_{21} = .280$ in CA; $= .410$ in CO).⁸

In an attempt to isolate the specific aspects of cognitive structure contributing to voter preferences, a stepwise discriminant analysis (Wilks) of yes and no voters was performed on the 21 belief times outcome evaluation products. The results indicate that 6 $b_i a_i$ products significantly contributed to the discriminant equation ($p < .05$). These outcomes were "reduce litter," "improve public health and safety," "block better solutions to the problem," "increase beverage costs," "give people, especially children, an incentive to pick up discarded containers," and "create more government regulation."

Normative considerations were also found to contribute significantly to the formation of intention, both directly and indirectly. Therefore, the 13 normative belief times motivation to comply products were

⁸ The nonsignificant t -value for θ_{11} is not statistically different from zero. Since it is incongruous to expect zero measurement error in a large survey, the possibility of specification error must be acknowledged.

entered into a stepwise discriminant analysis (Wilks) of yes and no voter groups to identify salient referents. Five contributed to the discriminant equation ($p < .05$). These referents were "members of my family," "environmentalists," "close friends," "journalists," and "other consumers."

Discussion

The analysis provided evidence to support or, more properly "failed to falsify," H1 (model validity) and H2A (sufficiency assumption-behavior). Evidence was also provided leading to the rejection of H2B (sufficiency assumption-intention). Collectively, these results provide an explanation of the relationship between environmental attitudes and behavior, so often debated in the literature. The supported hypotheses confirm the fundamental role of ecological concern as a background variable which indirectly affects behavior.

It can be concluded that the influence of ecological concern, measured as a generalized or global attitude, is mediated by more specific attitudinal, normative, and behavioral intention variables. This outcome should be of interest to researchers who have questioned the use of attitude data in environmental policy research. It appears that the effects of ecological concern have been misinterpreted and improperly specified in previous research. By incorporating intervening attitudinal and normative variables research perspectives are likely to become more focused, increasingly powerful, and conceptually enhanced.

At the same time, the results raise doubt as to whether a continued focus on generalized environmental attitudes is warranted. While these measures may have some value in group level analysis, in this study their performance in individual-level prediction was found to be poor. In contrast, more domain-specific measures such as those incorporated in the Fishbein model are able to account for the majority of the variance in behavior. By operationalizing attitude and behavior at the same level of specificity (in terms of action, time, target, and context), prediction is greatly enhanced without diminishing the importance of ecological concern. In fact, respondents' evaluations of outcomes (a_i) made salient by an environmental issue, may provide a more accurate indication of their ecological concern than scores on a very abstract environmental attitude index. By considering their evaluations across a set of inter-related and sometimes conflicting outcomes, a more realistic and multi-dimensional assessment of their ecological concern is obtained. Furthermore, this approach places greater emphasis on how information about an environmental decision is channeled by a variety of ecological and domain-specific values.

For those concerned with solving environmental problems, the theory identifies the immediate determinants of environmental behavior that can be used in developing strategies or tactics designed to increase a person's *willingness to act on his ecological concern*. For example, since attitude toward the action is determined by cognitive structure, behavior could be influenced by changing the person's behavioral beliefs (b_i), adding behavioral beliefs to the person's cognitive structure, altering the person's evaluation of outcomes (a_i), or impacting the relative salience the person associates with outcomes. Because subjective norm is determined by the person's normative beliefs and motivation to comply with salient referents, behavior could also be influenced by affecting perceptions of referent expectations (nb_j), identifying new referents, influencing the relative salience of referents, or affecting the person's desire to comply with social influence (mc_j).

Regarding tests of the causal relations among model components, the findings (e.g., support of H1) were generally consistent with Ajzen and Fishbein's writings. Although in one state (CO), subjective norm was found to have a nonsignificant impact on intention, this can be explained by situational factors influencing the relative importance of personal versus normative considerations. One such factor might be the nearness of the election day and the opportunity for considerable prior deliberation. The Theory of Reasoned Action acknowledges that these situational influences exist.

The path linking normative structure with cognitive structure may be seen as raising questions regarding the conceptual and/or operational separation between the attitudinal and normative influences. However, before concluding that the constructs are invalid, it should be noted that the presence of such a relationship, or the lack thereof, may also be dependent on the situation (Fishbein and Ajzen, 1981; Miniard and Cohen, 1981, 1979). Moreover, while normative and cognitive structure variables were linked, subjective norm was directly influenced only by normative structure, and attitude toward the act only by cognitive structure. This result supports the view that there is utility in separating attitudinal and normative variables, as suggested by Ajzen and Fishbein (1980), despite the fact that they are correlated.

Tests of the sufficiency assumption produced mixed results. That is, the effect of ecological concern on intention was only partially mediated by the attitudinal and normative variables (rejection of H2B). However, the impact of this external variable on behavior was entirely indirect (acceptance of H2A). Interestingly, these results are very consistent with the contrary outcomes reported in earlier studies. For example, Crosby and Muehling (1982) found external variables had direct and indirect effects on intentions; however, they had no mea-

tures of actual behavior. Conversely, Loken (1982) found the influence of external variables on behavior to be completely mediated; but she did not report any test of effects on behavioral intention. The sufficiency assumption results reported in this study should help clarify previous findings; however, the reported outcome does not provide any satisfactory resolution of the issue.

Appendix

POLLUTION AND NATURAL RESOURCE ITEMS⁹

- I feel people worry too much about pesticides on food products.
- It frightens me to think that much of the food I eat is contaminated with pesticides.
- I feel fairly indifferent to the statement—"The world will be dead in 40 years if we don't remake the environment."
- I become incensed when I think about the harm being done to plant and animal life by pollution.
- I'm usually not bothered by so-called "noise pollution."
- I get depressed on smoggy days.
- When I think of the ways industries are polluting, I get frustrated and angry.
- The whole pollution issue has never upset me too much since I feel it's somewhat overrated.
- I rarely ever worry about the effects of smog on myself or my family.
- It is futile for the individual consumer to try to do anything about pollution.
- I think that a person should urge their friends not to use products that pollute.
- Every person should stop increasing their consumption of products so that our resources will last longer.
- The benefits of modern consumer products are more important than the pollution which results from their production and use.
- All consumers should be interested in the pollution aspects of products they purchase.
- I am personally interested in the pollution aspects of products I buy.
- Natural resources must be preserved even if people must do without some products.

REGULATION AND SPENDING ITEMS⁹

- It genuinely infuriates me to think that the government doesn't do more to help control pollution of the environment.
- The government should force all products off the market that pollute.
- I don't think we're doing enough to encourage manufacturers to use recyclable packages.
- Consumers should be made to pay higher prices for products which pollute the environment.
- Commercial advertising should be forced to mention the ecological disadvantages of products.

OUTCOMES

1. Would reduce litter.
2. Would improve public health and safety.
3. Would block better solutions to problem.
4. Would increase beverage costs.
5. Would give people, especially children, incentive to pick up discarded containers.

⁹ All items were answered on 7-point Likert scales labeled strongly agree, strongly disagree.

6. Would create more government regulation.
7. Would reduce solid waste that has to be burned or buried.
8. Would hurt the state's economy.
9. Would restrict individual freedom.
10. Would make it difficult to obtain the deposit refund.
11. Would penalize everyone for the mistakes of a few.
12. Would give litterbugs an incentive not to litter.
13. Would make those who litter pay for their own carelessness.
14. Would conserve energy and scarce resources.
15. Would give the average person an incentive not to litter.
16. Would add to my inconvenience in terms of storing and transporting empty containers.
17. Would protect the environment.
18. Would eliminate jobs in the container manufacturing industry.
19. Would reduce the assortment of brands and types of containers.
20. Would create jobs to handle recycling.
21. Would lower litter collection costs now paid for in taxes.

REFERENTS

1. Most members of my family.
2. The environmentalists.
3. My close friends.
4. Most journalists.
5. Most other consumers.
6. Most government officials.
7. The bottlers.
8. Most outdoor recreationists.
9. The liberals.
10. My co-workers.
11. Recycling center employees.
12. The conservatives.
13. The retailers.

References

- Ajzen, I., and M. Fishbein
 1973 "Attitudinal and normative variables as predictors of specific behaviors." *Journal of Personality and Social Psychology* 27:41-57.
 1980 *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, N.J.: Prentice-Hall, Inc.
- Andrews, F. M.
 1984 "Construct validity and error components of survey measures: a structural modeling approach." *Public Opinion Quarterly* 48:409-442.
- Antil, J. H., and P. D. Bennett
 1979 "Construction and validation of a scale to measure socially responsible consumption behavior." Pp. 51-68 in K. E. Henion and T. C. Kinnear (eds.), *The Conserver Society*. Chicago: American Marketing Association.
- Bagozzi, R. P.
 1981 "Attitudes, intentions, and behavior: a test of some key hypotheses." *Journal of Personality and Social Psychology* 41:607-627.
- Bentler, P. M., and G. Speckhart
 1979 "Models of attitude-behavior relations." *Psychological Review* 86:452-464.
 1981 "Attitude's 'cause' behaviors: a structural equation analysis." *Journal of Personality and Social Psychology* 40:226-238.

- Brooker, G.
 - 1976 "The self-actualizing socially conscious consumer." *Journal of Consumer Research* 3:107-112.
- Crosby, L. A., and J. D. Gill
 - 1981 "A causal path analysis of ecological behavior relating to marketing." Pp. 630-636 in K. B. Monroe (ed.), *Advances in Consumer Research*. Ann Arbor, MI: Association for Consumer Research 8.
- Crosby, L. A., J. D. Gill, and J. R. Taylor
 - 1981 "Consumer/voter behavior in the passage of the Michigan container law." *Journal of Marketing* 45:19-32.
- Crosby, L. A., and D. D. Muehling
 - 1982 "External variables and the Fishbein model: mediation, moderation, or direct effects?" Pp. 94-99 in A. A. Mitchell (ed.), *Advances in Consumer Research*. Ann Arbor, MI: Association for Consumer Research 9.
- Crosby, L. A., and J. R. Taylor
 - 1982 "Consumer satisfaction with Michigan's container deposit law—an ecological perspective." *Journal of Marketing* 46:47-60.
 - 1983 "Psychological commitment and its effects on post-decision evaluation and preference stability among voters." *Journal of Consumer Research* 9:413-431.
- Dunlap, R.
 - 1975 "The impact of political orientations on environment attitudes and actions." *Environment and Behavior* 7:428-454.
- Endo, R., and J. M. Nielsen
 - 1974 "Beyond public opinion: behavioral responses to air pollution." In M. Orleans and G. F. White (eds.), *Carbon Monoxide and the People of Denver*. Boulder, CO: Institute of Behavioral science.
- Farley, J. U., D. R. Lehmann, and M. J. Ryan
 - 1981 "Generalizing from 'imperfect' replication." *Journal of Business* 54:597-610.
- Fishbein, M.
 - 1967 *Readings in Attitude Theory and Measurement*. New York: John Wiley.
 - 1976 "Extending the extended model: some comments." Pp. 491-497 in B. B. Anderson (ed.), *Advances in Consumer Research*. Cincinnati, OH: The Association for Consumer Research 3.
- Fishbein, M., and I. Ajzen
 - 1975 *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
 - 1981 "On construct validity: a critique of Miniard and Cohen's paper." *Journal of Experimental Social Psychology* 17:340-350.
- Henion, K. E.
 - 1976 *Ecological Marketing*. Columbus, OH: Grid, Inc.
- Henion, K. E., and W. H. Wilson
 - 1976 "The ecologically concerned consumer and locus of control." Pp. 131-144 in *Ecological Marketing, Proceedings of the First National Workshop on Ecological Marketing*. Chicago: American Marketing Association.
- Herberger, R. A., and D. T. Buchanan
 - 1971 "The impact of concern of ecological factors on consumer attitudes and buying behavior." Pp. 644-646 in *Combined Proceedings*. Chicago: American Marketing Association 33.
- Jöreskog, K. G., and D. Sörbom
 - 1981 "Lisrel: analysis of linear structural relationships by the method of maximum likelihood, version v." Chicago: National Education Resources, Inc.
- Kassarjian, H. H.
 - 1971 "Incorporating ecology into marketing strategy: the case of air pollution." *Journal of Marketing* 35:61-65.
- Kinnear, T. C., and J. R. Taylor
 - 1973 "The effect of ecological concern on brand perception." *Journal of Marketing Research* 10:191-197.

- Kinnear, T. C., J. R. Taylor, and S. A. Ahmed
1974 "Ecologically concerned consumers: who are they?" *Journal of Marketing* 38: 20-24.
- Lepisto, L. R.
1979 "Environmental product attributes and product preference." Pp. 114-117 in R. Franz, R. Hopkins, and A. G. Toma (eds.), *Proceedings*. Lafayette, LA: Southern Marketing Association.
- Loken, B.
1982 "The theory of reasoned action: examination of the sufficiency assumption for a television viewing behavior." Pp. 100-105 in A. A. Mitchell (ed.), *Advances in Consumer Research*. Ann Arbor, MI: Association for Consumer Research 9.
- Maloney, M. P., M. P. Ward, and G. N. Braucht
1975 "A revised scale for the measurement of ecological attitudes and knowledge." *American Psychologist* 30:787-790.
- Mazmanian, D., and P. Sabatier
1981 "Liberalism, environmentalism, and partisanship in public policy-making." *Environment and Behavior* 13:361-384.
- Miniard, P. W., and J. B. Cohen
1979 "Isolating attitudinal and normative influences in behavioral intentions." *Journal of Marketing Research* 16:102-110.
1981 "An examination of the Fishbein-Ajzen behavioral intention model's concepts and measures." *Journal of Experimental Social Psychology* 17:309-339.
- Murphy, P. E.
1978 "Environmentally concerned consumers: demographic dimensions." Pp. 316-320 in S. Jain (ed.), *Proceedings of the 1978 Educator's Conference*. Chicago: American Marketing Association.
- Page, T. J.
1982 "Comments on investigations of the theory of reasoned action." Pp. 106-108 in A. A. Mitchell (ed.), *Advances in Consumer Research*. Ann Arbor, MI: Association for Consumer Research 9.
- Ryan, M. J.
1982 "Behavioral intention formation: the interdependency of attitudinal and social influence variables." *Journal of Consumer Research* 9:263-278.
- Ryan, M. J., and M. J. Etzel
1976 "The nature of salient outcomes and referents in the extended model." Pp. 485-490 in B. B. Anderson (ed.), *Advances in Consumer Research*. Cincinnati, OH: Association for Consumer Research 3.
- Van Liere, K. D., and R. E. Dunlap
1980 "The social bases of environmental concern: a review of hypotheses, explanations, and empirical evidence." *Public Opinion Quarterly* 44:181-197.
1982 "Environmental concern: does it make a difference how it's measured?" *Environment and Behavior* 13:651-676.
- Webster, F. E.
1975 "Determining the characteristics of the socially conscious consumer." *Journal of Consumer Research* 2:188-196.
- Wheaton, B., B. Muthén, D. F. Alwin, and J. F. Summers
1977 "Assessing reliability and stability in panel models." *Sociological Methodology* 84-136.

Change and Stability in Presidential Popularity at the Individual Level

KENT L. TEDIN

THE STANDARD approach to the study of change in presidential popularity has been to plot survey observations over time and treat each observation as an independent data point. This approach has led to a focus on macro-level predictors and the use of econometric (time series) statistical models. Change at the micro level, on the other hand, has received far less attention (for an exception, see Wanat, 1982).

However, from the standpoint of both the practice and theory of democracy the quality of individual change is of considerable importance. It is commonly agreed that presidential popularity is an important ingredient in the mix of attributes that constitute presidential power—the ability of the president to get things done (Neustadt, 1973). Are those persons who affect this power by altering their opinions located on the outskirts of political life, or does change occur among the most interested and sophisticated segments of society, or is it evenly spread? Evidence from the analysis of issue positions taken by panel respondents leads us to expect the latter. Most investigations into the reliability of the mass response on repeated measures show a stable attitude and measurement error, with the error spread evenly across levels of sophistication (Achen, 1975; Judd and Milburn, 1980).

Abstract This article employs a three-wave panel to examine change and stability in the popularity of the president. By survey standards, the item is found to be quite reliable, approaching the reliability of party identification. Change in the item can be predicted using measures of political interest and sophistication, partisanship, and strength of presidential approval or disapproval.

Kent L. Tedin is Professor and Chairman of the Department of Political Science, University of Houston.

Also important for the interpretation of presidential popularity is the behavior of the "undecided" respondents. Mueller (1973) argues that presidential approval is the mirror image of disapproval. Surges and declines do not come from the undecideds, but are the product of radical change. The undecided category is not a stopover for those who are in the process of changing their mind. Wanat's (1982) research supports Mueller on this point—at least with regard to international rally points. On the basis of a method for estimating cell frequencies from table marginals he observed that radical change was substantially more frequent than change involving the undecided category. He concluded that undecideds "are largely irrelevant when change in aggregate approval is examined. They are not participants in political life and may be ignored for some purposes" (1982:187). This statement implies a more or less stable base of undecided respondents, with little movement in and out of the category. A micro-level analysis of the behavior of undecideds should tell us something about the implications of basing presidential popularity on all respondents (as is usually the case in descriptive studies) or on only those with a negative or positive evaluation (more commonly seen in analytic pieces where popularity is operationalized by subtracting the negatives from the positives and ignoring the undecideds; see Stimson (1976) for an example of this approach).

Data

Data for this study were taken from a three-wave panel conducted in Texas. The first wave was executed between March 7 and March 15, 1982. A sample was drawn from the list of registered voters and stratified along racial, income, regional and urban-suburban lines to make it representative of the state's electorate. A total of 750 respondents was interviewed by telephone on the first wave. The second wave was conducted between May 10 and May 17 and 610 of the original 750 were reinterviewed. The final wave was executed between November 7 and November 15, yielding a total of 531 usable responses.

President Reagan's average 1982 popularity over the three waves of our panel was 56 percent, with 58 percent approving in March, 55 percent in May, and 54 percent in November. Given the absence of any event which might have had a substantial impact on presidential popularity, our investigation into the properties of the item must be placed within the context of little aggregate change. We shall address the following questions: (1) How reliable was the measurement of presidential popularity? (2) To what extent was change of the "radical"

variety as opposed to movement in and out of the undecided category? (3) What was the pattern of micro-level change? (4) What variables predict who changes and who remains stable?

Analysis

There are now numerous studies which attempt to account for the largely unpatterned individual-level change which characterizes most opinions toward public issues. The developing consensus (the "latent attitude" model) holds that while the indicators may show considerable fluctuation over time, much of the public has reasonably well-formed underlying attitudes. But questions of latent attitudes aside, in the case of presidential popularity it is the behavior of the *indicator* that gets reported by the press and read by the public—almost all of whom have no technical knowledge concerning opinion measurement. Panel analyses have shown single-item indicators to be notoriously bad measures of underlying concepts (Inglehart, 1985). Thus, in the peculiar instance of support for the president, the quality of measurement has unique importance.

THE RELIABILITY OF PRESIDENTIAL POPULARITY

Presented in Table 1 are the test-retest correlations for presidential popularity both with and without the undecideds. Also presented are the test-retest correlations for party identification, liberal-conservative ideology, and the governor's rating. Somewhat over one-half the variation in presidential popularity is explained by the previous measurement. This figure is not as high as for party identification, but is considerably higher than for ideology or the evaluation of the governor (whose aggregate approval was virtually unchanged over the panel—49 percent, 43 percent, and 46 percent).

With almost one-half the test-retest variation unexplained, it is apparent that presidential popularity is characterized by considerable movement at the individual level. Nevertheless, by survey standards, the item is reliably measured—a point of some consequence, given the practical importance of the statistic. It has a constant reliability of .74, which compares favorably to party identification which has a reliability of .80. On the other hand, the reliability of political ideology was only .51 and the reliability of the governor's rating was only slightly higher at .52.

ACCOUNTING FOR CHANGE

The recent literature on the stability of attitude indicators would suggest that much of the unexplained variation in the test-retest corre-

Table 1. Test-Retest Product-Moment Correlations for Texas Panel

	Texas Panel			Reliability ^a
	March-May	May-Nov.	March-Nov.	
Pres. popularity ^b	.74(531)	.67(531)	.69(531)	.74
Pres. popularity ^c	.81(469)	.74(445)	.73(468)	.82
Party identification	.83(525)	.82(523)	.85(524)	.80
Liberal/conservative ^d	.62(486)	.48(487)	.57(486)	.51
Rate Gov. Clements ^e	.53(531)	.51(531)	.52(531)	.52

^a The constant reliability estimate is $(r_{12})(r_{23})/(r_{13})$. A separate reliability estimate (Wiley and Wiley, 1970) yields the same inference.

^b Categories are approve, undecided, disapprove.

^c Categories are approve and disapprove only.

^d Respondents were asked to place themselves on a 1-7 scale.

^e Respondents were asked to rate the governor on a 0-10 scale.

lations for presidential popularity is random. We shall investigate the properties of change by first examining the 27 possible combinations of approve-undecided-disapprove over the three waves of the panel (presented in Table 2). Keeping in mind the context of very little aggregate change, we find that three patterns are apparent. First, the most frequent responses were approve-approve-approve and the converse. Stable respondents accounted for 67 percent of the sample. Second, only two of the 531 respondents were undecided in all three waves. Thus, the inert group is very small. Third, there was much more movement in and out of the undecided category than past research would lead us to expect. In fact, radical change (movement from approve to disapprove and the reverse) was only about three-quarters as frequent as movement in and out of the undecided category. A majority of those who changed their response did not go the entire distance to a complete reversal. While no more than 12 percent indicated that they were undecided at one point in the panel, 22 percent were undecided at some point during the seven-month period.

An "eyeballing" of Table 2 does not reveal any obvious pattern to the change process. No one particular change permutation attracts a greatly disproportionate number of respondents. In fact, the arrangement looks very much like what we have come to expect in panel studies of public opinion—a stable attitude and measurement error. A series of standard computations (Converse, 1964; Wiley and Wiley, 1970) testing for patterned vs. random change yielded mixed results.¹

¹ One test is to assume that true change can be described by a Markovian process, and that observations at time 1 influence those at time 3 only through time 2. This yields the prediction that $r_{13} = (r_{12})(r_{23})$. The former coefficient is .69; the latter is .50. Using the LISREL measurement model, which for single items reduces to the Wiley and Wiley (1970) method, yields an inference of a stable attitude and measurement error. However, I am

Table 2. Change in Presidential Popularity over Three Time Points (N = 531)

Responses ^a	Number of Cases	Percent
A-A-A	237	44.6%
A-A-D	11	2.1
A-D-A	10	1.9
A-D-D	8	1.5
A-A-U	10	1.9
A-U-D	4	0.7
A-U-U	2	0.3
A-U-A	21	3.9
A-D-U	0	0.0
D-D-D	117	22.0
D-A-A	9	1.7
D-D-A	18	3.4
D-A-D	9	1.7
D-U-A	8	1.5
D-D-U	5	0.9
D-U-D	16	3.0
D-U-U	0	0.0
D-A-U	0	0.0
U-A-A	7	1.3
U-A-D	2	0.3
U-D-A	3	0.6
U-U-U	2	0.4
U-U-A	6	1.1
U-D-U	8	1.5
U-D-D	12	2.2
U-U-D	2	0.4
U-A-U	1	0.2

^a A = approve; U = undecided; D = disapprove.

However, a close look at Table 2 shows the change permutations are not equiprobable as would be required by a model positing a stable attitude and random error (Inglehart, 1985). For example, among those unstable at T2-T3 the modal response at T3 is to *move back* to the evaluation held at T1 (e.g., approve-undecided-approve). Forty-seven percent of the unstable at T2-T3 show this nonrandom process.²

We shall next address the question of whether certain types of respondents are more likely to remain stable in support of the president

dubious that assumption of no serial correlation in the error terms is being met. On the other hand, if all change is random then for the T1-T2 shifters (for example) their opinion at T2 should not predict their opinion at T3. However, some of the permutations for this exercise yield statistically significant product-moment correlations. Also, if all change is random then the presidential evaluation of the shifters should not be related to issue questions beyond that expected by chance. Again, we find numerous statistically significant relationships (although the relationships for stable subgroup are considerably higher than for the unstable subgroup).

² An alternative explanation might be common response set in the independent and dependent variables or some other type of systematic response error.

than are others. The focus here is on stability, as any attempt to tackle the methodological pitfalls involved in separating true change from measurement error is beyond the scope of this article.

The dependent variable for this analysis is a binary scoring of respondents, over the three waves of the panel, as stable or unstable in their evaluations of the president. Three types of independent variables will be used: (1) political interest and sophistication, (2) partisanship, and (3) strength of presidential approval or disapproval. The null hypothesis of no relationship is taken from the recent literature on attitude stability (Achen, 1975; Judd and Milburn, 1980) which states that change in panel data is largely due to faulty measurement and is therefore spread evenly across subgroups. The alternative hypothesis (Converse, 1964) holds that for those most psychologically involved in politics the evaluation of the president is part of an integrated belief system. These individuals cling more firmly to their opinion because it has a better defined evaluative and/or cognitive support structure. Consequently, significant relationships should exist between the independent variables and stability. Of course, the test of this hypothesis also has implications for the interpretation of unreliability—i.e., to what extent is it due to the instrument vs. the individual (see Achen, 1975 for an elaboration).

The data clearly support the alternative hypothesis. The bivariate relationship (gamma) between the dependent variable and the political sophistication independent variables is .26 for knowledge of public figures, .23 for newspaper readership, .32 for the number problems mentioned by respondents to an open-ended query about the problems facing the state, and .28 for education (all, as well as those reported below, show a X^2 statistic significant beyond .05 unless otherwise mentioned). Political interest and activity display a similar pattern. Respondents were asked if they voted in the spring, 1982 primaries (38 percent said yes), and were also asked, on a one-to-four scale, to indicate the level of their political interest. The relationship is .33 for the former and .24 for the latter. The strength with which the attitude is held also predicts stability. For respondents who answered "approve" or "disapprove" a follow-up probe asked if the person "strongly" or "somewhat" approved/disapproved.³ Given three waves of the panel, this variable can range from zero to three (the undecideds were excluded). Gamma is .41, indicating that those who felt strongest were most stable over the seven-month period.

³ This correlation is based on 422 respondents who did not, at some point, answer "undecided." Including the undecideds would make the dependent variable partially tautological to the independent variable.

Table 3. Cross-tabulation of Party Identification and Stability of Presidential Popularity (*N* = 519)

	<i>Partisanship</i>						
	<i>Stg Dem</i>	<i>Weak Dem</i>	<i>Ind Dem</i>	<i>Ind</i>	<i>Ind Rep</i>	<i>Weak Rep</i>	<i>Stg Rep</i>
Stable approve	04%	23%	36%	55%	79%	85%	90%
Stable disapprove	55	30	19	09	05	15	10
Subtotal stable	59%	53%	55%	64%	84%	85%	90%
Unstable	41	47	45	36	16	15	10
	100%	100%	100%	100%	100%	100%	100%
	(138)	(88)	(68)	(49)	(77)	(40)	(59)

In terms of partisanship, it was the Democrats who were most unstable in their presidential evaluation. On the other hand, 90 percent of the strong Republicans and 85 percent of the weak Republicans were stable. That stability was almost entirely approve-approve-approve (see Table 3). Even the Independents were more stable than the Democrats—again with stable approvers accounting for the bulk of that stability. Only among strong Democrats did stable disapprovers greatly outnumber stable approvers. The lack of stability among Democrats may be due to the cross-pressures experienced by their white, conservative adherents. They are pulled in one direction by their partisanship and in another by their political ideology. The manifestation of this cross-pressure was opinion instability—44 percent of the white, conservative Democrats were unstable. On the other hand, 70 percent of the blacks were stable (all D-D-D). Of course, the political cues they receive tend to point overwhelmingly in one direction.

Conclusion

Though it is but a single question, the standard presidential popularity item shows a test-retest reliability that compares favorably with the best measured political attitudes. Also, the modest but consequential relationships between the independent variables and stability suggests that instrument problems are not as significant a cause of unreliability as is the case with issues. Much of the movement in the panel was due to respondents who at some point were undecided. They outnumbered those displaying "radical" change by about 1.5 to 1. The analysis showed generally that change during the period of this study was most prevalent among those least involved in politics. It seems reasonable to infer, therefore, that one group likely to rally to the president in time of crisis or withdraw support when the news is bad tends to be those on the fringes of political life. The irony that Converse (1962) noted with

regard to floating voters and media attention seems also to hold with regard to change in presidential popularity. That is, strong partisans and the most politically attentive are, in general, the least likely to change.

References

- Achen, Christopher H.
 1975 "Mass political attitudes and the survey response." *American Political Science Review* 69:1218-1231.
- Converse, Philip
 1962 "Information flow and the stability of partisan attitudes." *Public Opinion Quarterly* 26: 578-99.
 1964 "The nature of belief systems in mass publics." In David E. Apter (ed.), *Ideology and Discontent*. New York: The Free Press.
- Inglehart, Ronald
 1985 "Aggregate stability and individual-level flux in mass belief systems: the level of analysis paradox." *American Political Science Review* 79: 97-116.
- Judd, Charles, and Michael Milburn
 1980 "The structure of attitude systems in the general public." *American Sociological Review* 45: 627-43.
- Mueller, John E.
 1973 *War, Presidents, and Public Opinion*. New York: Wiley and Sons.
- Neustadt, Richard
 1973 *Presidential Power*. New York: Wiley and Sons.
- Stimson, James A.
 1976 "Public support for American presidents: a cyclical model." *Public Opinion Quarterly* 40: 1-21.
- Wanat, John
 1982 "The dynamics of presidential popularity shifts: estimating the degree of opinion shift from aggregate data." *American Politics Quarterly* 10: 181-89.
- Wiley, David, and John Wiley
 1970 "The estimation of measurement error in panel data." In Hubert M. Blalock (ed.), *Causal Models in the Social Sciences*. Chicago: Aldine.

Ethnicity-of-Interviewer Effects Among Mexican-Americans and Anglos

**STEPHEN D. REESE, WAYNE A. DANIELSON,
PAMELA J. SHOEMAKER, TSAN-KUO CHANG,
AND HUEI-LING HSU**

SURVEY researchers have long been aware that interviewers can affect the very responses they are assigned to gather. Fortunately, the variation in items attributable to who asks the questions is generally quite small (Tucker, 1983). However, race is one interviewer characteristic which exerts a systematic and significant biasing effect, particularly on answers to race-related questions. This study examines this "ethnicity"-of-interviewer effect in a survey of both Mexican-Americans and Anglos. As the fastest/growing minority in the U.S., Hispanics have attracted increasing research interest. To reach them, bilingual interviewers have been used (e.g., Greenberg et al., 1983), making potential interviewer effects a practical methodological issue. In addition to posing a validity concern, Schuman and Converse (1971) note that interviewer effects represent a useful indicator of relations between the racial (and ethnic) groups, a "fact of social life."

The current thinking is that interviewer effects can be explained through a theory of general deference. Respondents try to avoid offending an interviewer, specifically on items which mention the inter-

Abstract A general interpersonal deference explanation for ethnicity-of-interviewer effects is tested with a random survey of Anglos and Mexican-Americans using Anglo and Hispanic interviewers and questions related to Mexican-American culture. The theory was most clearly supported among Anglo respondents. The mixed support found among Mexican-Americans suggests that deference is strongest when questions deal with the culture represented by the interviewer, not the respondent.

Stephen Reese and Pamela Shoemaker are Assistant Professors in the Department of Journalism at the University of Texas at Austin, 78712, where Wayne Danielson is Jesse H. Jones Professor and Tsan-Kuo Chang is a doctoral candidate. Huei-Ling Hsu is a doctoral student at the Institute for Communication Research at Stanford University.

viewer's race. Most studies supporting such a race-of-interviewer effect, however, have examined only blacks and whites. Hyman et al. (1954) found that blacks gave different responses to whites than to other blacks, presumably out of deference to the dominant "caste." Black responses to items regarding militant protest and hostility to whites are particularly sensitive to race of interviewer, while blacks' reports of discrimination, living conditions, and personal background are not (Schuman and Converse, 1971). Subsequent studies have supported a more general interpersonal deference theory, which accounts for interviewer effects on whites as well as blacks (Athey et al., 1960, Hatchett and Schuman, 1975-76, and Campbell, 1981). What's more, a face-to-face interview is not required; the race-of-interviewer effect in a telephone interview has been found which is similar in magnitude to that reported from a personal survey (Cotter et al., 1982). This finding is of particular interest, given the predominance of telephone surveys as a data-gathering method.

Other ethnic groups have also been examined for interviewer effects, but the focus of these studies has been on nonracially sensitive items. Weeks and Moore (1981) found that a difference in ethnicity (Cuban, Chicano, Puerto Rican, and Chinese) between interviewers and respondents did not affect responses. Similarly, Welch et al. (1973) reported that Mexican-Americans did not differ in their responses to Anglos and other Mexican-Americans. Both studies were based on personal interviews about general items, supporting the basic theory that general deference does not occur for questions which aren't related to ethnicity.

This study tests the general deference theory using a telephone survey of Mexican-Americans and Anglos, with both Hispanic and Anglo interviewers. Both general and ethnicity-related questionnaire items are examined, including questions not previously studied for interviewer effects—ethnic media behavior and ethnic environment. Possible bias in such items is particularly important, given their frequent use in measures of acculturation.

On the basis of previous research it is hypothesized that no interviewer effects will be found for nonethnicity-related items (e.g., education), but that both Anglos and Mexican-Americans will defer to opposite-ethnicity interviewers on questions related to Mexican-American culture. In addition, it is hypothesized that among Mexican-Americans this deference will extend to their self-reports of ethnic environment and behavior. In other words, according to the general deference theory we would expect respondents to overreport ethnic behavior when interviewed by someone from the same ethnic background, and underreport it when interviewed by someone else.

Methods

SAMPLE

Between February and May of 1984, telephone interviews were conducted with 1076 Texas residents over the age of 18, using a random-digit dialing technique.¹ In order to supplement the number of Mexican-American respondents, a special sample of persons with Hispanic surnames was selected. This random sample was drawn using telephone books from cities with large Hispanic populations.² An additional 142 interviews were added to the data using this method. The random-digit sample produced a completion rate of 55.7 percent and a refusal rate of 21 percent. The supplementary sample yielded a completion rate of 69.6 percent and a refusal rate of 8.8 percent.³ In both samples, interviewers asked for a male or female resident at random and made as many as five callbacks on different days to reach a respondent. Only after five unsuccessful attempts or if the number was non-working or a business was it replaced with another from the cluster.

Both Hispanic and Anglo bilingual interviewers were hired to administer the questionnaires. Each interviewer spoke fluent regional Spanish and unaccented English. If a respondent said he or she spoke some Spanish, the interviewer offered to do the questionnaire in Spanish or to clarify any words or phrases in Spanish. The first question put to respondents was which language they spoke with family and friends.

¹ Two hundred telephone exchanges were drawn at random without replacement from a list of all state exchanges. A working "seed" bank within each exchange was established during pretesting, and 20 random two-digit numbers were attached to each seed number (e.g., (512) 345-13—) to create the numbers in each of 200 "clusters." Four interviews were attempted in each cluster for a target sample size of 800. Those exchanges yielding two or more Hispanic interviews were oversampled to reach the final *N* of 1076.

² These areas included Laredo, Encinal, San Antonio, Corpus Christi, Alamo, Brownsville, Donna, Edcouch, Edinburg, Elsa, Hargill, Harlingen, Hidalgo, La Feria, Los Fresnos, Lyford, McAllen, Mercedes, Mission, Pharr, Port Isabel, Raymondville, Rio Hondo, San Benito, San Juan, Santa Rosa, Sullivan City, Weslaco, and El Paso. Numbers were randomly chosen from each community's listings, proportionate to its size, such that towns with larger populations contributed more respondents than others. The selection of telephone numbers was conducted by first choosing a random page, column, and location and then selecting the nearest number associated with an Hispanic surname.

³ The completion rates were calculated as follows: (completed interviews)/[(total numbers called) - (numbers out of service + numbers changed + business numbers + noneligible respondents)]. The total numbers called included "no answer" after five tries. The refusal rates were the proportion of those contacted who refused the interview. The distribution of telephone numbers yielding completed interviews reflects the actual distribution of numbers in exchanges across the state, and the demographic characteristics of respondents are consistent with 1980 state census parameters. A separate study by the authors showed that the two methods yielded samples which can be considered to represent the same population of Hispanics (Chang et al., 1985).

If some Spanish was spoken they were given the opportunity to be interviewed in Spanish. A total of 86 questionnaires were conducted in Spanish. Ethnicity of interviewer affected neither respondents' self-reported language nor the language spoken during the interview. Only those respondents questioned by interviewers who had either clearly Anglo or Hispanic surnames and who used their names in the questionnaire introduction were included in the analysis. Questionnaires were randomly distributed among these individuals, such that each interviewer conducted a cross-section of interviews from around the state. This procedure yielded 1004 total interviews for analysis. Of this total, Hispanics conducted 724 interviews, 199 (27.5 percent) of them with other Hispanics. Anglos administered interviews, 85 (30.4 percent) with Hispanics.⁴ As reflected in these proportions, no significant differences in response rates were found for the two groups of interviewers.

MEASURES

Respondents were considered Mexican if they said their ethnic background was wholly or partially Hispanic, which included Mexican-Americans, Puerto Ricans, and Cubans. Mexican-Americans accounted for most of the Hispanic respondents (86.4 percent).⁵ The culturally related items included ethnic media use, attitudes toward Mexican-Americans, attitudes toward bilingualism, and reports of ethnic interpersonal environment. Exact questionnaire items are included in the Appendix.

Results

The results support the deference theory most clearly among the Anglo respondents. As seen in Table 1, four of the six comparisons show statistically significant differences. Anglos were less likely to

⁴ The data examined in this study were part of a larger project which examined a cross-section of Texas residents, with a particular focus on the media behavior, political attitudes, and ethnicity of Hispanics. The total questionnaire took about 20 minutes to administer. The research was funded by a Gannett foundation grant to the first three authors.

⁵ The label *Mexican-American* is used throughout this study because it is the most common name applied to Hispanics in Texas. Many of the cultural items in the questionnaire refer specifically to "Mexican-Americans." Because of the common Spanish heritage, it is thought that the few non-Mexican-American Hispanics in this study would respond similarly in the case of the race-of-interviewer effect. By the same token, the few blacks (10 percent of the total) and other non-Hispanic ethnic respondents were included in the Anglo category for purposes of discussion because the theoretical distinction is between those interviewed by someone from the same ethnic background and by someone of a different ethnicity. Blacks, for example, would be expected to behave the same as whites when interviewed by an Hispanic.

Table 1. Ethnicity-of-Interviewer Effects on Mexican-American and Anglo Respondents: Cultural Evaluations and Issues

		Anglo Respondents		Mexican-American Respondents	
		Anglo Interviewer	Hispanic Interviewer	Anglo Interviewer	Hispanic Interviewer
<i>N</i> Interviewers/ <i>N</i> Respondents ^a		5/164	12/453	4/85	11/199
Prefer Mexican-American culture and customs to others	Agree	9.4%	23.2% ^b	58.1%	58.2%
	No opinion	19.3	30.0	26.0	18.5
	Disagree	71.3	46.8	15.9	23.3
Would rather associate with Mexican-Americans than with others	Agree	8.2	9.7	42.3	34.4
	No opinion	35.6	37.9	25.7	17.9
	Disagree	56.2	52.4	32.0	47.7
Mexican-Americans are a lot different from other people	Agree	31.2	19.8 ^b	41.5	25.8
	No opinion	19.8	14.7	2.8	12.4
	Disagree	49.0	65.5	55.7	61.8
Everyone should be able to speak Spanish	Agree	26.7	31.9 ^b	57.9	60.4
	No opinion	10.4	14.5	8.2	7.3
	Disagree	62.9	53.6	33.9	32.3
Grade school classes should be taught in Spanish and English	Agree	37.8	41.5 ^b	73.7	67.1
	No opinion	6.1	9.1	3.7	7.4
	Disagree	56.1	49.4	22.6	25.5
Everyone should be able to speak English	Agree	82.5	81.6	80.7	84.5
	No opinion	8.1	7.0	3.6	7.3
	Disagree	9.4	11.4	15.7	8.2

^a Although interviewer ethnicity is discussed as a characteristic of respondents, statistical tests are based on the *N* of interviewers, yielding an approximation of results obtained using the respondent as the unit of analysis, but a more conservative statistical test. Values represent the mean proportions of respondents selecting each response, averaged across interviewers.

^b Differences are statistically significant based on a one-tailed *t*-test (*df* = 15), *p* < .05.

disagree that they preferred Mexican-American culture when interviewed by a Hispanic rather than by another Anglo. Note that the *N* of interviewers is used for statistical tests, an approach used by, for example, Singer et al. (1983).

Similarly, Anglos were more likely to disagree that Mexican-Americans are a lot different from other people when asked by a Hispanic. Anglos were less favorable toward bilingualism when interviewed by an Anglo; they were more likely to disagree that everyone should be able to speak Spanish and that grade school classes should be taught in both English and Spanish when interviewed by an Anglo than by a Hispanic. Statistically significant results were not found, however, for the same items among Mexican-American respondents, and, in fact, the responses shown in Table 1 show effects in two directions. For two of the three cultural evaluation items, there appears to be a reverse deference effect. When interviewed by an Anglo rather than by another Hispanic, Mexican-Americans were more likely to agree that they would rather associate with other Mexican-Americans and that they are a lot different from others. For the language attitude

items, although Hispanics were more likely to agree that grade school classes should be bilingual when asked by an Anglo than when asked by another Hispanic, responses to the other two items showed very slight differences in the other direction.

Other items were examined which dealt specifically with ethnicity, so only Mexican-Americans' responses were included in Table 2. Again, results are found both for and against the deference hypothesis. Three items are supportive (one statistically significant): Hispanics reported watching more TV news in Spanish and having more Mexican-American friends and neighbors when interviewed by another Hispanic than by an Anglo. On the other hand, they reported reading less in Spanish and perceived having a Spanish-language newspaper as less important when interviewed by a Hispanic than when interviewed by an Anglo.

Other noncultural questionnaire items were also examined for interviewer effects (not shown here). The only ones which produced substantial differences between Hispanic and Anglo interviewers (although not statistically significant) were education and income. When interviewed by an Anglo, Mexican-Americans reported higher educational attainment and higher family income than when interviewed by a Hispanic.

Although no interviewer effects were expected for ethnicity items (in Table 2) among Anglos (given that so few reported ethnic behavior), two statistically significant differences were found supporting the deference hypothesis. Every Anglo (100 percent) interviewed by another Anglo said having a Spanish paper to read was not important, while 96 percent told Hispanic interviewers it was not important. Similarly, 99 percent of Anglos told Anglo interviewers that half or fewer of their friends were Mexican-American while 96 percent gave those responses to Hispanic interviewers.⁶ Other analyses were conducted for other questionnaire items, but no significant differences were found and the results are not reported. For example, respondents were asked to evaluate various Hispanic political groups, and to indicate how well the media were doing in reporting on "people like them." These ambiguous reference items and the appraisals of specific groups were apparently not subject to the same interviewer effects found for more personally direct items relating to cultural behavior and attitudes. Respondents were also asked about their general media use and at-

⁶ For the items in this study where significant differences were found, calculating Eta^2 —the proportion of variance in responses attributable to interviewer ethnicity—produced values between 1 and 3 percent, comparable to the size of effects found in previous studies.

Table 2. Ethnicity-of-Interviewer Effects on Mexican-Americans: Ethnic Media, Interpersonal Environment, and Socioeconomic Status

	<i>Anglo Interviewer</i>	<i>Hispanic Interviewer</i>
<i>N</i> Interviewers/ <i>N</i> Respondents ^a	4/83	11/199
How much TV news watched in Spanish		
None	73.8%	65.7%
At least some	26.2	34.3
Overall, how much TV watched in Spanish		
None	46.2	45.5
At least some	53.8	54.5
How much radio listened to in Spanish		
None	41.0	42.2
At least some	59.0	57.8
How many newspapers and magazines read in Spanish		
None	67.5	85.3 ^b
At least some	32.5	14.7
Importance of having daily newspaper to read in Spanish		
Not important	42.7	49.6
At least a little important	57.3	50.4
How many Mexican- American friends		
Half or less	62.2	38.7
More than half	37.8	61.3
How many Mexican- American Neighbors		
Half or less	69.1	42.2 ^b
More than half	30.9	57.8

^a Although interviewer ethnicity is discussed as a characteristic of respondents, statistical tests are based on the *N* of interviewers, yielding an approximation of results obtained using the respondent as the unit of analysis but a more conservative statistical test. Values represent the mean proportions of respondents selecting each response, averaged across interviewers.

^b Differences are statistically significant based on a one-tailed *t*-test (*df* = 14), *p* < .05.

itudes toward the (English language) media. A complete list of the questionnaire items is available from any of the first three authors.

Discussion

This study shows that an ethnicity-of-interviewer effect exists for both Mexican-Americans and Anglos in a telephone survey context. The results partially confirm hypotheses derived from a theory of inter-

personal deference. Even presumably more "objective" self-reports of behavior and conditions are subject to interviewer effects as are the more "subjective" attitudinal items (although not always in the predicted direction).

The responses by Anglos to the cultural evaluation and bilingualism items are most compatible with the deference theory. Those questions may be considered the most potentially sensitive to an Hispanic interviewer and, indeed, showed the strongest effects. However, those same items failed to show interviewer effects among Hispanics themselves. The latter results are nevertheless consistent with those reported by Cotter et al. (1982), who found a general lack of interviewer effects among blacks when the questions were about blacks. The authors suggested that blacks felt no need to alter responses about their own race but that deference effects would be found if blacks were asked about whites. We would expect similar findings in this study had Mexican-Americans been asked about Anglos.

Other items showed mixed results and may require different explanations beyond deference. In the cases where Hispanics exaggerated their ethnic behavior (TV news watched in Spanish) and proportion of ethnic contacts (friends and neighbors), a cultural affinity or "halo" effect may be at work. This phenomenon represents, perhaps, an effort to appear more like the ethnic group represented by the interviewer, which calls for either enhancing or diminishing reported ethnic characteristics, depending on who asks the questions. Although not overtly cultural, education and income questions may also be said to produce responses resulting from this process. Mexican-Americans are no doubt aware of the socioeconomic disparity between themselves and Anglo society and may shade their status to more closely match the perceived status of the interviewer.

Conversely, two items related to Spanish-language print media use produced results contrary to this explanation. Reading and perceived importance of Spanish-language print media were greater when Mexican-Americans responded to Anglo interviewers than when they responded to other Hispanics. Further study is needed to examine which types of ethnicity-related items show a cultural affinity effect and which a reverse affinity effect, and why.

The results discussed above, although based on an *N* of 1004, used the interviewer as the unit of analysis, thus producing a more conservative test than when the number of respondents is the unit of analysis. Additional research employing a greater number of interviewers than available here is needed before stronger conclusions are drawn, particularly regarding the Mexican-American respondents. What is more, to more fully test the deference theory among Mexican-Americans, other

questions need to be examined. Specifically, items should be included which ask Hispanics to evaluate Anglos and Anglo culture, so as to better approximate classic studies of blacks and whites which originally generated the interpersonal deference explanations.

As the Spanish population in the U.S. continues to grow, it will become even more important for surveys to include them in order to be representative. To do so, bilingual interviewers will no doubt be used. This study shows that ethnicity of interviewers can exert a significant biasing effect on a variety of cultural questions, even over the phone.⁷ Fortunately, this effect is not large—respondents were not prompted to fundamentally alter their attitudes (from agree to disagree, for example), but they did shade their responses depending on who they talked with. Whether this bias results from general deference, as other work has suggested, or from other processes, such as cultural affinity, is left to future research.

Appendix: Questionnaire Items

1. About how much of the *news* you watch on television is in Spanish? Would you say—none of it, less than half, about half, more than half, all of it?
2. *Overall*, about how much of the television you watch is in Spanish? Would you say—none of it, less than half, about half, more than half, all of it?
3. How much of the time that you listen to the radio is it in Spanish? None of the time, less than half, about half, more than half, all or most of the time?
4. About how many of the newspapers and magazines you read are in Spanish? Would you say—none, less than half, about half, more than half, all of them?
5. How important is it for you to have a daily newspaper to read in Spanish? Would you say—not important at all, a little important, somewhat important, very important?
6. About how many of your neighbors would you say are Mexican-Americans? Almost all, about $\frac{3}{4}$, about $\frac{1}{2}$, about $\frac{1}{4}$, very few, none?
7. How many of your friends are Mexican-American? Almost all, about $\frac{3}{4}$, about $\frac{1}{2}$, about $\frac{1}{4}$, very few, none?
8. Would you agree or disagree with the following statements? I prefer Mexican-American culture and customs to other culture and customs. Agree strongly, agree, no opinion, disagree, disagree strongly (the following items shared the same scale).
9. Given the choice, I would rather associate with Mexican-Americans than with other people.
10. Mexican-Americans are a lot different from other people.
11. Everybody who lives in Texas ought to be able to speak English.
12. Everybody who lives in Texas ought to be able to speak Spanish.
13. Grade school classes in Texas ought to be taught in both English and Spanish.

⁷ In this study the interviewers' names, and slight accent in some cases, were presumed to inform respondents of interviewer ethnicity. Unfortunately, there were too few respondents questioned by "nameless" interviewers for reliable comparisons. It would be informative in future studies to determine if concealing interviewer ethnicity reduces its effect on response bias.

References

- Athey, K. R., J. E. Coleman, A. P. Reitman, and J. Tang
1960 "Two experiments showing the effect of the interviewer's racial background on responses to questionnaires concerning racial issues." *Journal of Applied Psychology* 44:244-46.
- Campbell, B. A.
1981 "Race-of-interviewer effects among southern adolescents." *Public Opinion Quarterly* 45:231-44.
- Chang, T. K., W. Danielson, S. Reese, and P. Shoemaker
1985 "Mexican-Americans as an ethnic sample: random digit dialing vs. sampling by surname." Paper presented to the annual conferences of the Association for Education in Journalism and Mass Communication, Memphis, Tennessee.
- Cotter, P. R., J. Cohen, and P. B. Coulter
1982 "Race-of-interviewer effects in telephone interviews." *Public Opinion Quarterly* 46:278-86.
- Greenberg, B. S., M. Burgoon, J. K. Burgoon, and F. Korzeny
1983 *Mexican Americans and the mass media*. Norwood, N.J.: Ablex.
- Hatchett, S., and H. Schuman
1975- "White respondents and race-of-interviewer effects." *Public Opinion Quarterly* 39:523-28.
- Hyman, H., et al.
1954 *Interviewing in Social Research*. Chicago: University of Chicago Press.
- Schuman, H., and J. M. Converse
1971 "The effects of black and white interviewers on black responses in 1968." *Public Opinion Quarterly* 35:44-68.
- Singer, E., M. R. Frankel, and M. B. Glassman
1983 "The effect of interviewer characteristics and expectations on response." *Public Opinion Quarterly* 47:68-83.
- Tucker, C.
1983 "Interviewer effects in telephone surveys." *Public Opinion Quarterly* 47:84-95.
- Weeks, M. F., and R. P. Moore
1981 "Ethnicity-of-interviewer effects on ethnic respondents." *Public Opinion Quarterly* 45:245-49.
- Welch, S., J. Comer, and M. Steinman
1973 "Interviewing in a Mexican-American community: an investigation of some potential sources of response bias." *Public Opinion Quarterly* 37:115-26.

The Polls: The Most Admired Man and Woman

TOM W. SMITH

Heroes are created by popular demand, sometimes out of the scantiest materials . . .

—GERALD WHITE JOHNSON, *American Heroes and Hero-Worship*

Lives of great men oft remind us/we should make our own sublime.

—HENRY WADSWORTH LONGFELLOW, "A Psalm of Life"

SOCIETY'S HEROES both reflect social norms and shape them. When people select heroes, they choose individuals who exemplify and personify virtues valued by the society. In turn, the heroes become standards of excellence that people can identify with and, if they wish, strive to emulate. By studying those whom society admires we can not only learn about its cast of heroes, but also draw inferences about the values shared by its people. Similarly, by following changes in its hero types we can track how society is changing.

Almost yearly since 1947 Gallup has been asking the American public what man and what woman "living today in any part of the world" they admire the most. (For details on wordings and occurrences see the Appendix). These questions comprise the longest, most consistent, and richest data series on the heroes of recent American society.

As with any single indicator, the most-admired question has its strengths and weaknesses. First, since the question is open-ended, we get an essentially unrestricted outpouring of nominations. The generated list is not constrained by a questioner's choices and the instrument is sensitive to changes in public taste, dramatic events, and other changes. The open-ended format has drawbacks, however. In most surveys many minor (often solitary) selections were not preserved,

Tom W. Smith is Senior Study Director, National Opinion Research Center (NORC), University of Chicago.

being lumped together into a nameless miscellany. In addition, open-ended questions require respondents to think more than closed alternative questions, and as a result, item nonresponse is often quite high. Second, until 1961 only the first choice of each respondent is recorded so it is not possible to study within-subject variation over the entire period. To cover the entire period consistently, the second mentions are not analysed below. Third, the question indicates the relative rank of heroes. We know the popularity of an individual vis-à-vis others and can chart how the hero's popularity changes over time relative to that of others, but we do not know the absolute level of admiration and how it has changed. Finally, the contemporary focus naturally eliminates such enduring historical figures as the Founding Fathers. By forcing people to select from present-day figures we naturally have their attention directed to contemporary events.

Most Admired Man: Overall

Domestic political leaders are by far the most popular heroes for Americans, accounting for 45 percent of all mentions over the years.¹ Presidents are the most popular political figure, with incumbent presidents accounting for 18.8 percent and ex-presidents for another 7.8 percent. Presidents are followed by elected officials (15.3 percent), especially senators and governors who were presidential aspirants (e.g., Adlai Stevenson and Ted Kennedy). Judges and other appointed officials make up the remaining 3.1 percent. Following domestic political leaders are religious leaders (12.9 percent). The leading religious leaders have been Billy Graham and the Catholic popes. Third come foreign political leaders (7.9 percent), including government leaders, royalty, and UN officials. For many years Winston Churchill dominated this category, and Anwar Sadat was a major figure in the 1970s. Fourth, military leaders make up 7.4 percent of selections. Dwight D. Eisenhower (before his elevation to the presidency) and MacArthur were the leading lights. Fifth, those in science, medicine, and education account for 2.5 percent. Even this rather low rating exaggerates the level of admiration of intellectuals since the science category includes many scientific explorers (e.g., the astronauts) and few Nobel laureates. Similarly, the medical category is dominated by Albert Schweitzer—as noted for his religious works as his health contributions. Cultural figures, running the gamut from Leonard Bernstein to Elvis Presley, account for 2.4 percent. Reformers and activists, primarily civil right leaders, had 2.1 percent. That leaves at the bottom

¹ In this and other figures, the Don't know/none categories have been excluded. Tables with the Don't know/none categories excluded are available from the author.

business and labor leaders (0.9 percent) and members of the fourth estate (0.8 percent). In addition, 4.9 percent selected a relative or personal friend, and 13.2 percent fell in a miscellaneous group, mostly unidentified.

What does this tell us about America? The clearest message is that when Americans think of admired men, they overwhelmingly think of their president and other political leaders. While much has been written about the cynicism of Americans toward politics and their distaste for politicians, Americans show a great deal of admiration for their elected leaders. Equally striking is the message we don't hear. While America is commonly pictured as a materialistic society and as the bastion of capitalists, Americans almost never pick business leaders as objects of admiration. Old money, new money, financial and manufacturing innovators, heads of multinational corporations—none get more than a rare nod of acknowledgment. In fact, the two men who make up the *majority* of business selections (Bernard Baruch and Lee Iacocca) were probably chosen as much for their public service as for their economic contributions.

Most Admired Man: Trends

Objects of admiration have shown decided shifts over the years. While the year-to-year peaks and valleys are of interest, we will restrict ourselves to examining only the general, long-term shifts. Domestic politics has shown a loss of allure over the years. If we treat Eisenhower as a political figure even before his election as president, the proportion selecting elected officials shows a decline of almost 3–4 percent per annum. Troughs were reached in 1974 after the resignation and pardon of Richard Nixon and in 1980 after Ronald Reagan's victory over Jimmy Carter. Within this general decline, incumbent presidents show a special pattern. For each president admiration waned over the course of his term in office. Yet even in the admiration ditch of Watergate, people did not fully turn away from government, for Henry Kissinger rose tremendously in esteem in 1973 and 1974 and almost matched the drop among elected politicians.

Also going down was the military. Exact trends depend on just how and when we convert Ike from five-star general to president, but military figures dwindle in the 1960s and disappear after 1977. The final category showing an overall decline is foreign political leaders. The drop in this case is in large part accounted for by the retirement and eventual death of Churchill. Both declines represent the dying echoes of World War II as the great military and political leaders of war pass on.

The two rising categories are religious leaders and personal inti-

mates. Both increase their popularity despite well-known sociological theorizing about the growth of modern society that is secular and cosmopolitan, with weakening ties to the old institutions of community, church, and family. The rise in religion is partly a positive response to the evangelical travels of Pope John Paul II, who is much more popular than his predecessors.

While other changes may be occurring in the remaining categories (economics, culture, mass media, and science/medicine/education), the small numbers involved compared to the large numbers in the unidentified miscellaneous category make the situation uncertain.

Most Admired Woman: Overall

Over the last 30 years a near majority of Americans (48.5 percent) have selected domestic political figures as the most admired women. Former First Ladies, especially Eleanor Roosevelt and Jacqueline Kennedy, are the most popular (32.4 percent), followed by incumbent First Ladies (6.6 percent). Wives of the other major politicians as well as women holding office in their own right make up 5.7 percent, while office holders and their wives account for 3.8 percent. Foreign political leaders constitute the second largest category (15.4 percent). This consists of female heads of state and government such as Margaret Thatcher, Indira Gandhi, Golda Meir, and to a lesser extent, members of royalty—especially the British monarchy. Those in the category of culture come next with 6.1 percent, a diverse blend of both “serious” and “popular” artists. This is followed by those in the category of religion with 2.7 percent (dominated by Mother Theresa) and science, medicine, and education with 2.1 percent (mostly Sister Kenney). The remaining general categories all gather few mentions (mass media 1.6 percent, reformers and activists 1.1 percent, military 0.1 percent, and economics 0.1 percent). In addition, friends and relatives garner 7.9 percent of the choices.

Most Admired Woman: Trends

Domestic political leaders have declined as an object of admiration. This drop is particularly acute among former First Ladies. Roosevelt generally dominated the lists in the 1940s to the early 1960s, and Kennedy played a similar role until her remarriage to Aristotle Onassis, but since then no former or current First Lady has scored so high. The space vacated by political figures and their wives has been filled primarily by a gain in foreign political figures. The selection of women to head the governments of India, Israel, and England in the 1970s and/

or 1980s gave women more foreign models to draw on, and since 1971 Meir or Thatcher has led in 7 of 12 surveys.

Also showing some gain over time have been the categories of religion (primarily due to Mother Theresa's prominence since 1979) and of relatives and friends.

Man and Woman: A Comparison

Over the years it has been harder for respondents to think of a woman whom they admire than a man. Until recently, the percentage saying "none" or "don't know" has generally been 10-15 percentage points higher for women than for men. (The two exceptions were in December 1963, when President Kennedy's widow attracted such strong sympathy that there was less nonresponse about women than men, and in 1969, when a coding peculiarity appears to have inflated item nonresponse for men). The margin has fallen in recent years, however, to around 5 percentage points, and in 1984 the woman question had lower nonresponse than men. This seems to have resulted from Geraldine Ferraro's vice-presidential candidacy and may or may not mark a lasting development. The general trend, however, is quite clear and pronounced. As women have filled more domestic and foreign positions of power, it has become easier for respondents to find suitable admiration models.

Perhaps the most striking similarity between men and women is the high dominance of politics and government among both sexes. Americans tend to turn first to their presidents for heroic models. Even when the presidential exemplar has been less than praiseworthy (e.g., Nixon in 1973-1974), Americans do not stray far, selecting other political and government leaders in the president's stead. Likewise, since it has not been possible to select a president as most admired woman, Americans have turned to the best approximations they can find, First Ladies and foreign leaders.

Differences between admired men and women result largely from sex segregation in social roles. Men lead women in the three categories where men hold almost all of the top leadership roles: the military (men 7.4 percent vs. women 0.1 percent), religion (12.9 percent vs. 4.0 percent), and science/medicine/education (2.5 percent vs. 2.1 percent). On the other hand, more women than men are drawn from the arts and entertainment (men 2.4 percent vs. women 6.1 percent), mass media (0.8 percent vs. 1.6 percent), and relatives and friends (4.9 percent vs. 7.9 percent). While the mass media category is small, it illustrates a key point. More women from the media are chosen than men though men have always held the top media positions (e.g., evening anchor, White

House reporter, editorial commentator, newspaper editors, etc.). Women lead men not because they actually dominate the field, but because their role is relatively greater (and more visible) than the role they play in such alternative fields as the military, religion, or science.

Vox Populi

Democratic idealism, not materialism, guides the admiration of the American people. Their heroes are presidential: incumbent presidents, ex-presidents, presidential aspirants, and the wives, mothers, and daughters of presidents. In turn, Americans have a tendency to try to turn their heroes into presidents. Eisenhower epitomized this tendency, and we see other examples in the political career of John Glenn and the recent draft Iacocca movement. Yet a series of failed and disappointing presidencies have diminished the public faith in politics and government. There is talk that the personal popularity and successes of Ronald Reagan have turned things around. While public admiration has risen from the dark days of Watergate and the frustrations of the Carter years, there has been no rebound to the heady years of Eisenhower and the early New Frontier and Great Society years, when government figures predominated.

When not selecting presidential and government exemplars, Americans have tended to select other people who are serving the public good or some higher power. In the early years, the military commanders of World War II were common choices. They were praiseworthy not only for their military successes, but also because they had fought to preserve and protect the country. As the cohort of World War II military leaders passed into history and the failures of Vietnam replaced the triumphs of World War II, military leaders disappeared from the admiration lists. Another group dedicated to selfless service, religious leaders, expanded into the void left by the declining political and vanishing military figures. If faith was lost in political and military power, it was gained in the agents of the Almighty.

In contrast, economic leaders have been ignored as admiration models. While Americans generally favor our free enterprise system, acknowledge that capitalists play an important role in development, and believe that private strivings lead to general gain, they perhaps believe that economic leaders receive their just rewards from the marketplace and do not venerate them. Similarly, figures in the arts and entertainment fields do not rank high. In part, this may reflect a lack of appreciation for high culture and the fine arts (most of the persons mentioned certainly fall in the popular category), but it also results from the fact that these stars are not seen as dedicated to serving the common good.

Most Admired Man, 1948-1984 (Percent)

	1948	1949	1950	1951	1952	1953	1954	1955	1957	1958
Political/gov. (domestic)	34.6	25.6	17.6	17.5	42.4	44.4	45.9	38.3	35.3	36.9
President	20.9	12.4	4.5	8.3	5.1	29.1	27.2	26.1	27.2	22.3
Ex-president	3.3	3.1	3.9	1.8	1.4	5.9	5.5	5.4	4.0	5.0
Other politicians	9.7	9.6	8.5	6.5	34.6	8.5	12.2	5.2	3.1	8.0
Gov. officials	0.7	0.5	0.7	0.9	1.3	0.9	1.0	1.6	1.0	1.6
Political/gov. (foreign)	5.8	13.1	8.1	6.8	5.8	10.3	12.9	11.6	7.3	11.6
Foreign leaders	5.3	12.8	7.5	6.5	5.1	10.2	12.8	11.4	6.7	11.2
UN officials	0.0	0.0	0.4	0.1	0.3	0.0	0.0	0.0	0.6	0.3
Royalty	0.5	0.3	0.2	0.2	0.4	0.1	0.1	0.2	0.0	0.1
Economic	1.0	3.3	2.5	0.9	1.6	1.4	2.5	1.4	0.0	1.4
Business	0.6	2.0	2.4	0.8	1.1	1.4	1.9	1.1	0.0	1.4
Labor	0.4	1.3	0.1	0.1	0.5	0.0	0.6	0.3	0.0	0.0
Entertainment/culture	2.6	2.0	1.7	2.0	3.1	1.3	1.7	1.3	0.0	0.4
Sports	0.5	0.7	0.7	0.8	1.1	0.2	0.1	0.3	0.0	0.0
Arts	2.1	1.3	1.0	1.2	2.0	1.1	1.6	1.0	0.0	0.4
Science/education	1.5	2.1	1.5	1.8	2.4	2.8	3.5	5.1	7.2	7.0
Military	25.6	18.9	40.8	39.7	11.6	7.5	3.2	4.0	2.8	2.8
Religion	3.1	4.5	3.6	4.2	6.3	5.9	9.8	8.4	7.5	8.9
Mass media	1.0	2.9	1.3	1.1	1.3	0.3	0.6	0.7	0.0	0.0
Activists/reformers	0.0	0.0	2.0	0.5	0.7	0.1	0.2	0.7	0.0	0.9
Relatives/friends	1.0	1.3	0.8	4.9	1.3	0.1	0.7	0.6	0.0	1.4
Misc., listed	0.8	0.3	0.4	0.3	1.08	0.1	1.5	0.4	0.0	0.0
Misc., unspecified	1.3	1.1	0.1	0.0	0.6	5.5	0.0	0.2	14.2	11.4
DK/none	21.8	24.9	19.5	20.3	22.3	20.3	17.5	27.1	25.7	17.4
	(1572)	(1497)	(1369)	(1317)	(1424)	(1483)	(1488)	(1433)	(1527)	(1509)

	1961	1963	1965	1966	1967	1969	1970	1971	1972	1973
Political/gov. (domestic)	45.1	40.5	43.9	48.0	40.8	33.3	29.9	29.6	32.3	34.1
President	22.9	20.7	19.1	14.0	7.5	15.7	10.0	9.2	11.4	6.2
Ex-president	17.6	13.3	12.6	12.8	13.2	5.9	3.4	3.6	6.4	0.1
Other politicians	4.4	6.2	10.4	19.0	18.2	11.2	15.3	16.3	10.6	16.3
Gov. officials	0.2	0.3	1.8	2.2	1.9	0.5	1.2	0.5	3.9	11.5
Political/gov. (foreign)	10.2	7.5	1.7	4.7	3.0	1.2	1.1	2.8	2.1	0.6
Foreign leaders	10.2	7.3	1.1	1.3	2.1	1.1	0.5	1.7	2.1	0.6
UN officials	0.0	0.2	0.6	3.4	0.8	0.0	0.3	1.1	0.0	0.0
Royalty	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.0	0.0	0.0
Economic	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.0
Business	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Labor	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Entertainment/culture	0.9	0.9	2.4	0.6	1.6	1.1	1.2	3.1	1.7	1.2
Sports	0.1	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.1
Arts	0.8	0.9	2.3	0.5	1.3	1.1	1.2	3.1	1.7	1.1
Science/education	5.9	4.1	1.8	0.3	1.4	0.8	0.8	0.4	0.6	0.3
Military	1.7	1.1	0.0	0.5	1.4	0.4	0.6	0.5	0.7	1.0
Religion	6.1	5.4	9.1	10.1	11.0	9.6	11.1	12.5	11.5	9.6
Mass media	0.2	0.6	0.2	0.2	0.1	0.7	0.5	0.7	0.3	0.3
Activists/reformers	1.1	2.5	2.8	1.5	1.5	0.1	0.8	2.4	1.3	2.2
Relatives/friends	0.2	4.7	4.0	3.3	2.3	2.6	3.2	3.9	5.5	5.7
Misc., listed	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.5	0.6	0.3
Misc., unspecified	4.7	9.5	11.9	5.2	5.9	7.6	13.5	8.9	11.6	12.8
DK/none	23.3	23.1	21.8	25.7	30.9	42.4	37.2	34.4	31.5	32.0
	(1602)	(1613)	(1565)	(1469)	(1549)	(1537)	(1546)	(1504)	(1504)	(1536)

Most Admired Man, 1948-1984 (Percent) (continued)

	1974	1977	1978	1979	1980	1981	1982	1983	1984
Political/gov. (domestic)	34.3	24.0	24.0	27.6	15.0	29.7	26.2	27.8	22.0
President	3.0	9.5	9.3	8.2	3.7	19.7	14.7	19.6	11.5
Ex-president	2.3	3.5	6.5	2.8	3.3	5.0	5.0	2.6	2.8
Other politicians	12.3	8.4	6.9	14.2	5.9	3.2	5.4	4.1	5.8
Gov. officials	16.7	2.6	1.3	2.4	2.1	1.8	1.1	1.5	1.9
Political/gov. (foreign)	0.8	11.9	9.4	5.6	7.7	1.7	1.5	1.1	0.3
Foreign leaders	0.8	11.9	9.4	5.6	7.7	1.7	1.5	1.1	0.3
UN officials	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Royalty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Business	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
Labor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Entertainment/culture	1.4	2.8	3.9	1.1	1.8	2.3	2.3	1.6	1.9
Sports	0.1	0.7	1.4	0.3	0.5	0.4	0.1	0.1	0.1
Arts	1.3	2.1	2.5	0.8	1.3	1.9	2.2	1.5	1.8
Science/education	0.2	0.0	0.0	0.0	0.0	0.0	0.3	1.3	0.2
Military	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Religion	9.3	7.6	17.1	16.7	12.5	11.0	13.7	11.8	12.1
Mass media	0.2	0.7	0.3	0.3	0.5	0.5	0.1	0.8	0.5
Activists/reformers	1.5	0.9	0.8	0.8	1.5	1.1	2.1	7.2	6.2
Relatives/friends	4.0	4.7	3.1	5.2	8.0	8.8	10.3	6.2	5.0
Misc., listed	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Misc., unspecified	12.0	15.0	16.4	12.3	14.1	19.7	16.1	18.1	17.5
DK/none	36.1	32.2	25.1	30.5	38.9	25.3	27.4	24.2	32.3
	(1517)	(1518)	(1563)	(1549)	(1549)	(1508)	(1507)	(1510)	(1518)

Most Admired Woman, 1947-1984 (Percent)

	1947	1948	1949	1951	1952	1953	1954	1955	1957	1958
Political/gov. (domestic)	36.0	35.3	37.5	36.9	39.9	41.0	43.4	37.2	37.1	34.9
President family	1.4	1.2	0.9	1.1	1.0	4.1	5.8	4.4	3.0	4.0
Ex-presidential family	29.6	28.0	32.0	28.9	30.0	30.0	26.9	24.7	29.9	25.8
Other political	1.3	2.7	1.8	4.3	4.1	0.7	4.8	0.9	0.9	1.0
Gov. officials	3.7	3.4	2.8	2.6	4.8	6.2	5.9	7.2	3.3	4.1
Political/gov. (foreign)	10.8	13.4	3.5	4.8	6.1	11.4	5.8	6.7	7.3	7.6
Foreign leaders/wives	6.7	9.7	1.6	2.9	1.4	1.6	1.5	1.5	0.9	2.3
UN officials	0.1	0.0	0.2	0.4	0.3	5.1	1.0	0.9	0.6	0.2
Royalty	4.0	3.7	1.7	1.5	4.4	4.7	3.3	4.3	5.8	5.1
Economic	0.0	0.1	0.0	0.0	0.2	0.3	0.2	0.0	0.0	0.0
Business	0.0	0.1	0.0	0.0	0.2	0.3	0.2	0.0	0.0	0.0
Labor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Entertainment/culture	5.0	5.2	4.6	3.9	6.8	2.0	8.2	1.2	2.9	5.2
Sports	0.1	0.1	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0
Arts	4.9	5.1	4.6	3.9	6.6	2.0	8.1	1.2	2.9	5.2
Science/education	10.1	4.4	3.8	5.0	3.7	0.3	0.3	0.0	0.0	0.0
Military	0.3	0.3	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0
Religion	0.3	0.1	0.6	0.4	0.3	0.2	0.6	0.0	0.0	0.0
Mass media	1.6	0.8	0.5	1.7	0.8	0.4	0.4	0.0	0.0	0.5
Activists/reformers	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Relatives/friends	3.1	3.1	3.3	2.4	2.7	0.7	1.9	2.3	0.0	2.8
Misc., listed	3.8	3.4	2.5	2.0	3.2	2.8	2.3	3.7	2.4	3.6
Misc., unspecified	0.2	0.9	1.1	1.2	1.1	5.0	0.8	5.6	9.8	8.4
DK/none	28.7	32.8	42.5	41.6	35.1	35.9	36.0	43.3	40.5	36.8
	(1482)	(1462)	(1373)	(1369)	(1424)	(1483)	(1483)	(1433)	(1527)	(1509)

Most Admired Woman, 1947-1984 (Percent) (continued)

	1961	1963	1965	1966	1969	1970	1971	1972	1973	1974
Political/gov. (domestic)	42.6	60.0	45.2	32.9	26.7	24.7	24.6	21.7	18.3	18.8
President family	5.4	1.1	3.8	3.8	3.4	4.6	4.9	9.0	4.1	4.3
Ex-presidential family	33.5	55.5	39.8	25.7	16.7	14.4	12.4	7.7	7.7	8.9
Other political	1.4	2.2	0.6	2.6	5.8	4.1	5.0	4.5	5.9	4.5
Gov. officials	2.3	1.2	1.0	0.8	0.8	1.6	2.3	0.5	0.6	1.1
Political/gov. (foreign)	5.1	2.9	5.3	10.3	13.7	8.9	15.4	12.4	19.9	11.8
Foreign leaders/wives	1.1	0.7	2.1	6.5	10.5	7.5	14.0	11.3	18.8	11.1
UN officials	0.4	0.4	0.1	1.1	0.0	0.2	0.1	0.0	0.0	0.0
Royalty	3.6	1.8	3.1	2.7	3.2	1.2	1.3	1.1	1.1	0.7
Economic	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Business	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Labor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Entertainment/culture	1.9	2.0	5.3	2.3	5.6	2.7	4.3	4.1	3.4	3.8
Sports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.7
Arts	1.8	2.0	5.3	2.3	5.6	2.7	4.3	4.1	2.6	3.1
Science/education	0.1	0.0	0.3	0.6	1.3	0.6	0.8	1.2	1.1	2.2
Military	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Religion	0.1	0.0	0.2	0.1	0.5	0.0	0.0	0.1	0.0	0.1
Mass media	1.2	0.5	0.3	0.5	1.2	0.6	1.1	0.4	1.2	0.8
Activists/reformers	0.0	0.0	0.0	0.0	3.1	1.7	1.5	1.2	1.4	2.4
Relatives/friends	2.5	4.9	5.8	5.6	4.2	1.7	6.0	7.0	7.7	5.9
Misc., listed	2.3	1.0	2.1	1.1	0.3	0.0	0.0	0.0	0.0	0.0
Misc., unspecified	4.1	6.3	7.1	4.2	2.7	8.0	6.1	9.2	8.3	8.1
DK/none	40.2	22.4	28.3	42.4	40.7	48.0	40.4	42.7	38.7	46.3
	(1602)	(1613)	(1565)	(1469)	(1537)	(1546)	(1504)	(1504)	(1536)	(1517)
	1977	1978	1979	1980	1981	1982	1983	1984		
Political/gov. (domestic)	21.4	27.7	20.5	15.1	19.9	12.9	13.9	26.9		
President family	5.5	6.9	9.9	4.5	4.8	3.5	5.4	3.6		
Ex-presidential family	10.2	15.7	8.0	4.7	9.0	5.4	5.1	3.8		
Other political	5.7	5.1	2.6	5.9	1.8	2.6	2.1	15.2		
Gov. officials	0.0	0.0	0.0	0.0	4.3	1.4	1.3	4.3		
Political/gov. (foreign)	8.8	9.2	6.4	7.8	8.9	13.8	16.1	17.9		
Foreign leaders/wives	6.9	7.7	5.2	7.0	7.2	10.4	13.7	15.9		
UN officials	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Royalty	1.9	1.5	1.2	0.8	1.7	3.4	2.4	2.0		
Economic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Labor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Entertainment/culture	5.3	3.1	1.8	2.9	4.0	5.3	2.6	3.1		
Sports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Arts	5.3	3.1	1.8	2.9	4.0	5.3	2.6	3.1		
Science/education	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2		
Military	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Religion	0.3	0.1	4.6	6.2	5.8	8.8	10.2	7.7		
Mass media	2.3	1.9	2.5	1.2	1.5	2.0	1.8	0.6		
Activists/reformers	0.7	1.0	1.2	0.9	0.7	1.2	0.9	1.4		
Relatives/friends	6.6	5.2	6.2	9.4	9.3	10.3	9.0	5.1		
Misc., listed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Misc., unspecified	15.2	17.4	13.2	11.3	19.9	13.7	16.2	6.8		
DK/none	38.5	34.4	43.6	45.1	30.0	32.1	29.4	30.3		
	(1518)	(1563)	(1549)	(1549)	(1508)	(1507)	(1510)	(1518)		

Appendix: Question Wordings

	AIPO Study Number
1. What person, living today, that you have heard or read about do you admire most?	370, 371T
2. What person, living today in any part of the world, that you have heard or read about do you admire the most?	371K, 390, 425K ^c
3. What man/woman, living today in any part of the world, that you have heard or read about, do you admire the most?	408 ^a , 425T ^c , 433K ^b
4. What woman, living in any part of the world, that you have heard or read about do you admire the most?	433T
5. What man/woman that you have heard or read about, living today in any part of the world, do you admire the most?	450TSP, 469 ^a , 509, 524, 540, 557, 576 ^c , 593, 608, 622 ^c
5A. And who would be your second choice?	639 ^c , 653, 666 ^c , 681, 703 ^c , 721, 738, 755 ^b , 772 ^c , 793, 820, 842, 861, 885, 920, 990, 117G, 144G, 166G, 186G, 206G, 228G, 246G
6. What man that you have heard about, living today in any part of the world, do you admire the most?	469, 483
7. Which of these famous women comes closest to your ideal of what you, yourself, would like to be?	483
8. Which woman that you have heard or read about, living today in any part of the world, do you admire the most?	703
9. Here is a list of 25 prominent women, which one would you say you admire most? Is there any woman not on this list whom you admire most in the world today?	755 9
10. Here is a list of 20 women, which one of them would you say you admire the most? And who would be your second choice?	773
11. Here is a list of prominent women. Would you tell me which three of these women you admire the most? Is there anyone not on this list whom you particularly admire?	964

^a Asked only about woman.

^b Asked only about man.

^c Data unavailable.

Occurrences of Most Admired Question

Study	Date	Wordings		
		Man	Woman	Person
A370	4/46	—	—	1
A371	5/46	—	—	1,2
A390	2/47	—	—	2
A408	11/47	—	3	—
A425	8/48	—	3	—
A433	11-12/48	3	4	—
A450	11-12/49	5	5	—
A469	1/51	6	5	—
A483	12/51	6	7	—
A509	12/52	5	5	—
A524	12/53	5	5	—
A540	12/54	5	5	—
A557	12/55	5	5	—
A576	12/56	5	5	—
A593	1/58	5	5	—
A608	12/58	5	5	—
A622	12/59	5	5	—
A639	12/60	5A	5A	—
A653	12/61	5A	5A	—
A666	12/62	5A	5A	—
A681	12/63	5A	5A	—
A703	12/64	5A	8	—
A721	12/65	5A	5A	—
A738	12/66	5A	5A	—
A755	12/67	5A	9	—
A772	12/68	5A	?	—
A773	1/69	—	10	—
A793	11/69	5A	5A	—
A820	12/70	5A	5A	—
A842	12/71	5A	5A	—
A861	12/72	5A	5A	—
A885	12/73	5A	5A	—
A920	12/74	5A	5A	—
A964	12/76	—	11	—
A990	12/77	5A	5A	—
A117G	11/78	5A	5A	—
A144G	11/79	5A	5A	—
A166G	12/80	5A	5A	—
A186G	11/81	5A	5A	—
A206G	12/82	5A	5A	—
A228G	12/83	5A	5A	—
A246G	11-12/85	5A	5A	—